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**Emergence and Transformation of E-supply Relationships
in the Network Context:
A Study of A Newly Formed Chinese Telecom Enterprise**

Susanna Xin Xu

A thesis submitted for the degree of

DOCTOR OF PHILOSOPHY

University of Bath
School of Management

May 2005

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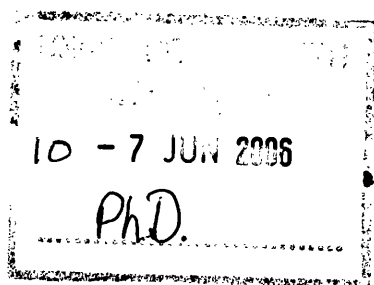
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Susanna Xin Xu

Abstract

This study investigates the dynamics of the formation and transformation of e-supply relationships in the Chinese cultural, technological and industrial network context. It focuses on managing supply relationships in a newly formed large Chinese telecom company. The aim is to provide better insights into inter-organisational business relationships enabled by the application of newer types of electronic technology in different contexts; and to develop a new conceptual framework of electronic business relationships. In this research, the conceptualisation of the transformation process of e-supply relationships represents circuits of interactions between managerial actions and social structures, as well as the particular cultural and technological context within which the interactions take place. Transformation in supply relationships contributes to a wider organisational change process. Understanding inter-organisational business relationships in this context contributes to a better understanding of organisational transformation.

This research employs an interpretive case study approach that involves the collection of qualitative data through semi-structured interviews and direct observations within seven electronic technology enabled organisations that are part of the newly formed large Chinese telecom company's network in China and the UK. The investigation provides some insights into the role of national and corporate cultures both inside and between organisations in shaping e-supply relationships in this specific context. The extent and effectiveness of the use of e-technologies in this study depends on several issues, which can have both direct and indirect influences on managing e-supply relationships.

The findings indicate that new Chinese telecom enterprises seem to have a higher tolerance of cultural differences and a willingness to accept alternative viewpoints, but when different national and industrial factors are taken into account, wide variations exist in developing and maintaining business relationships. In particular, the key variation with respect to e-

supply relationships is rooted in the Chinese cultural norms of '*guanxi*' that have important impacts on the success of the telecom enterprises in the ever-changing Chinese environment. By introducing the new concept of '*guanxi-platform*', which is a new practice to form relations in today's Chinese-based business, the findings emphasise the importance to gain a better understanding of the cultural issues in managing business relationships. These Chinese cultural characteristics also pose a challenge to Western enterprises to understand today's Chinese-based business dynamics and long-term orientation.

The empirical understanding generated in this context has implications for managing organisational inter-dependency of e-technology enabled business relations. For managers, these insights not only open up cultural aspects of inter-organisational relationships but also suggest that emergence of different cultural norms may accompany the enactment of e-inter-organisational relationships. These insights would be particularly valuable for Western organisations forming alliances with Chinese enterprises.

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Abbreviations

A-R-A Model:	Actors, Resources and Activities Model
BD:	Business Development
BT:	British Telecom
B2B:	Business-to-Business
CEO:	Chief Executive Officer
CRM:	Customer Relationship Management
CSD:	Customer Service Department
CSR:	Customer Service Representative
CSS:	Customer Service System
CTI:	Computer Telephony Integration
E-commerce:	Electronic Commerce
EDI:	Electronic Data Interchange
EFT	Electronic Funds Transfer
E-IORs:	Electronic technology enabled inter-organisational relationships
ERP:	Enterprise Resource Planning
E-relationship:	Electronic business relationship
E-supply relationship:	Electronic Supply Relationship
E-technology:	Electronic Technology
FDI:	Foreign Direct Investment
GDP:	Gross Domestic Product
ICT:	Information and Communication Technology
IMP Group:	Industrial Marketing and Purchasing Group
IOR:	Inter-Organisational Relationship
IP:	Internet Protocol
IS:	Information Systems
IT:	Information Technology
IVR:	Interactive Voice Response
JIT:	Just-In-Time
MII:	Ministry of Information Industry
MIS:	Management Information Systems
MPT:	Ministry of Posts & Telecommunications

PBX:	Private Branch Exchange
PSTN:	Public Switched Telephone Networks
PTA:	Postal and Telecommunications Administration
PTB:	Postal and Telecommunications Bureaux
PTE:	Postal and Telecommunications Enterprise
RAP Model:	Relationship Assessment Programmes Model
R&D:	Research and Development
SC:	Supply Chain
SCM:	Supply Chain Management
SME:	Small and Medium Enterprise
SOE:	State-Owned-Enterprise
TCE	Transaction Cost Economics
WTO:	World Trade Organisation

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PART I RESEARCH OVERVIEW

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Chapter 1

INTRODUCTION

This chapter introduces the background to this research and issues to be explored in this thesis. The research issues related to managing e-technology enabled business relationships are reviewed and discussed in section 1.2. This section also presents China's potential opportunities and challenges in the global competitive environment. Section 1.3 reviews the previous research and studies in the fields of supply chain management as well as information systems. The research objectives and the key research question are presented in this section. Section 1.4 presents the outline of this thesis.

1.1 Introduction

Recently, there has been a dramatic change in the way that companies are competing both domestically and globally when doing business. Rapidly changing competitive business environments are forcing them to seek more creative and flexible models for meeting competition by forming relationships with their suppliers, buyers, customers, competitors and allies. Those relationships not only enable the organisations to grow and develop, but are also a constraint on that development and their activities (Ford, Berthon, Brown, Gadde, Håkansson, Naude, Ritter, & Snehota, 2002). Porter and Fuller (1986, p. 316) say that the formal and long-term alliances, which they term as "coalitions", between firms are viewed as the strategic alternatives in competing internationally. Similarly, Ohmae (1989) agrees that globalisation makes alliance an essential tool for serving customers. Hamel, Doz and Prahalad (1989, p. 133) claim that "a strategic alliance can strengthen both companies against outsiders even as it weakens one partner vis-à-vis the other."

In addition, the impact of the Internet on global competition is transforming the supply chain (SC). It is claimed that supply chain management (SCM) is

becoming more important as a result of dynamic inter-organisational co-operation to maintain organisational global competitive advantages. Harland, Powell, Zheng, Caldwell and Woerndl (2002) argue that the most critical partnerships to be developed and nurtured are those with suppliers and customers; the more a company can capitalise on its networks of suppliers and customers, the greater the chance it may gain a sustainable competitive advantage (Jarillo, 1993; Harland, 1996). Thus, forming an alliance in the SC becomes one of the most popular strategies in order to share capabilities and risks with partners who have the same needs. As Lamming (1993, p. 85) states that “companies often cannot face the challenges of working globally without support from strong collaborators.”

Furthermore, competition and globalisation are closely connected to one another. The interactions between competition and globalisation foster worldwide networking among organisations (Oral & Kettani, 1998). This considerable change influences the nature of inter-relations. To survive in this competitive environment, many countries have undergone revolutionary changes in key industries like telecom. The Chinese government has conducted a series of reform initiatives in its telecom industry since the late 1990s. These reforms have not only helped China’s telecom industry to make tremendous progress over the past two decades in terms of its development and transformation, but also enabled the telecom companies to make significant changes.¹

Today, China’s telecom industry has been continuously expanding with its World Trade Organisation (WTO) membership. By joining the WTO, Internet related businesses allow more flexibility of foreign investments in China, which are viewed as value-added businesses. With the gradually opening market, international investments could strengthen the abilities of China’s domestic telecom enterprises. These also create and foster China’s advantages in global competition. The emergence and employment of electronic commerce (e-

¹ Ministry of Information Industry special report in Chinese, 2001

commerce) emphasise the necessity of developing and maintaining international business relationships in China as well.

This research presents the findings from an in-depth study on the emergence and transformation of electronic supply relationships (e-supply relationships) in a newly formed large Chinese telecom enterprise – TelcoX (pseudonym). It aims to provide better insights into organisational relationships enabled by the application of newer types of e-technology in the cultural context and to develop a new conceptual framework of e-relationships. The conceptualisation of the emergence of e-supply relationships in TelcoX represents circuits of interactions between managerial actions and social structures, and the particular cultural and technological context within which the interactions take place. This study examines the wider context by reviewing and discussing the current situation and further development of SCM and telecom services in China.

This thesis discusses the opportunities and challenges of use of newer type of Internet-based e-technologies in China. It also illustrates the importance of national and corporate cultures in shaping supply relationships enabled by the application of emerging e-technologies. The implementation and use of a new customer service system (CSS) and other new information systems (IS) in TelcoX are understood as specific e-technologies enabling e-supply relationships. Finally, the thesis discusses the implications of the findings and recommendations for future research.

1.2 Research Environment

As discussed earlier, competition is increasingly becoming recognised as an important element of strategic planning (Porter, 1990; Cox, 1995; Marken, 1996; Oral & Kettani, 1998; Brown, 2001). Organisations are restructuring, outsourcing, reengineering, subcontracting and forming alliances with business partners (Marken, 1996) in order to survive in today's fiercely competitive global environment. Porter's study (1990) emphasises the importance of the competitiveness at a national level, which influences the performance of its

firms at home and abroad. Oral and Kettani (1998) argue that a nation provides a competitive environment in which the firms are created, organised and managed with its natural resources, human capabilities, political regimes, government organisations, research and educational institutions, financial systems, cultural and social values. Therefore, it is of prime importance for companies to understand the competitive environment in which they and their competitors are operating.

The competitive advantage at a firm level has also received considerable attention with a variety of offered competitive analysis frameworks and models (Porter, 1980, 1985; Karnani, 1982, 1984, 1985; Oral, 1993). With the proliferation of sophisticated solutions, the information technology (IT) investment decision for businesses has become a complex choice for enterprises.

Since the Internet-based e-commerce-driven marketplace has put increased stress on organisations to make dramatic and drastic changes (Marken, 1996), firms therefore draw benefits from their IT solutions and investments to their own unique circumstances. The electronic IT such as electronic data interchange (EDI) provides linkages to the enterprises (Gattorna, 1998), enterprise resource planning (ERP) systems enable the execution of strategy at an operational level (Baxendale & Jama, 2003; Michael, 2001). Communications systems such as common databases and e-mail systems ensure that information is shared across the organisations.

To cope with change and to create, sustain and improve firms' competitive positions, Marken (1996) suggests that firms need to be lean, agile and quick to respond in order to take the challenges of changes. Oral and Kettani (1998) suggest that it is essential for firms to develop their core competence areas. Thus, outsourcing "non-core" business and establishment of relationships with global suppliers and customers are becoming popular strategies (Gattorna, 1998). It creates a strong incentive for large firms to narrow their scope of business activity (Nolan, 2001, p 100).

1.3 Research Background and Opportunities

China is becoming more and more open to the outside world since its 'economic reform' was implemented in 1978 (She & Yu, 1993). The reforms in China's telecom industry have enabled the industry to introduce competition in value-added markets and promote the rapid development of the entire industry. It is claimed that the Internet technologies present great potential for network services in China. Thus, a new era of digital economy in China has led to a demand for telecom services (She & Yu, 1993; Chen, 1993).

Increasingly more and more global organisations form business relationships with Chinese partners. However, the management of business relationships in Chinese-based business varies from Western countries (Pang et al., 1998). The Chinese cultural context is not well represented in the literature. This is a limitation for Western organisations on which to build business relationships with Chinese enterprises. It indicates that there is a need for drawing some implications for global organisations.

There are however only a few large-scale in-depth case studies on electronic technology (e-technology) enabled business relationships management (Kim, Lee, & Pan, 2002; Yao, Palmer, & Dresner, 2002). From an IS perspective, despite the recognition of the importance of the wider organisational and human issues associated with the organisational relationships and e-technology implementation, many of the current studies still ignore aspects beyond the technological issues. These studies attempt to identify factors leading to the success or failure of enterprise-wide system implementation (Aladwani, 2001; Dong, 2000a; Holland & Light, 1999; Nah, Lau, & Kuang, 2001; Shanks, Parr, Hu, Corbitt, Thanasankit, & Seddon, 2000) or propose new models to confirm e-technology as one solution for organisational formation and transformation (Al-Mashari, 2000; Boudreau & Robey, 1999; Brown & Vessey, 1999; Holland & Light, 1999; Kelly, Holland, & Light, 1999).

A growing body of organisational studies has contributed to the explanation and analysis of organisational relationships (Oliver, 1990; Grandori & Soda, 1995). From an economics point of view, many of the earlier studies are based on transaction cost economics (Williamson, 1975) and resource-based theory (Barney, 1991). Different conceptual models are developed and suggested as different ways for the management of business relationships (Cousins, 2001; Lamming, Cousins, & Notman, 1996). However, Cousins (2001) argues that a relationship should be viewed as an intra- and inter- organisational process which is referred to as a “quasi firm” (Blois, 1972) sitting between two organisations (see Ford et al., 2002; Lamming, 1993). Therefore, it is essential to develop a conceptual framework that focuses on the dynamics of organisational relationships and the transformation process.

Previous research therefore has many limitations: first, there is the absence of an adequate, coherent theoretical basis that could draw attention to important issues such as organisational issues noted by Kim et al. (2002). Second, many of the studies on intra- and inter- organisational relationships are based on quantitative data and employ methods such as surveys or secondary data reviews (Child, 1987; Lamming, Johnsen, Zheng, & Harland, 2000). Such studies provide only snapshots of business relationships and are limited in providing rich descriptions of research phenomena. Third, there are very few large-scale in-depth case studies of the electronic business relationships (e-relationships) management (Kim et al., 2002; Yao et al., 2002), especially on studying global IS in emerging economies (Shoib & Nandhakumar, 2003), such as e-relationships with China. Finally, there is a lack of research focusing on diverse cultural contexts such as Chinese.

This thesis therefore seeks to address some of these limitations by presenting the findings from an in-depth case study research on the emergence and transformation of e-supply relationships in the network context of TelcoX.

1.4 Research Objectives and Key Research Question

As stated above, there are only a few studies on global IS and e-relationships in Chinese cultural context and we have limited understanding of the role of Chinese culture in such relationships. This study therefore focuses on the roles of Chinese national and corporate cultures by drawing on the cultural and technological perspectives.

To provide a base for understanding the network context and the nature of inter-relations among organisations, chapter 2 and 3 will provide a literature review on supply relationships, business contexts and Internet technology within supply networks. These two chapters reveal that there is a lack of theoretical understanding of the management of new form of relationship that is enabled by the application of e-technology.

These two chapters will also highlight the gaps in theory on the dynamics of transformation of e-supply relationships. Thus, to understand the dynamics of e-relationships, this study attempts to draw on mixed theoretical perspectives (including cultural and technological perspectives) to identify the key factors from different perspectives in managing business relationships and to conceptualise the formation and transformation of e-relationship.

To redefine the research focus highlighted, there is a need to explore the dynamics of e-supply relationships in today's business environment by conducting a pilot study. The pilot study (see chapter 5, 5.3.2, p. 68) illustrates the dramatic changes in the telecom industry that provides more emergent empirical data to meet the objective of this study.

As outlined above, much of the previous research on intra- and inter-organisational relationships are mostly quantitative and there are only a few large-scale case studies. Research methods that will be provided in chapter 5 illustrates the needs for carrying out an interpretive in-depth case study to

understand the dynamic and complexity of e-relationships within their social settings.

In summary, the objective of this study is therefore to investigate the dynamics of the formation and transformation of the supply relationships that are enabled by the application of newer types of e-technologies in the network contexts within the case study organisation in China, TelcoX. Hence, the key research question explored in this research is:

What are the roles of national and corporate cultures in helping to establish and maintain e-supply relationships both inside and between organisations?

To understand the roles of cultures in helping to establish and maintain e-relationships within different cultural contexts, this study looks at cross-cultural working in the e-technology enabled organisations in China and their business partners in the West.

By focusing on the process of formation and transformation of e-supply relationships, this study explores how the emerging national and corporate cultures shape e-supply relationships which have just been established; and in turn, how the e-supply relationships established in the network context help to produce emerging corporate culture.

The transformation in supply relationships may contribute to a wider organisational change process. Understanding inter-organisational business relationships in this context contributes to a better understanding of organisational transformation. Chapter 12 will discuss in detail the contributions of transformations of e-supply relationships. In addition, this study seeks to draw some conclusions and implications for practice which will be presented in chapter 13.

1.5 Outline of the Thesis

Figure 1.1 presents the outline of this thesis that is divided into six parts. Part II includes chapter 2 and chapter 3 that present an overview of the literature review on SCM by reviewing some key concepts related with the development of SCM as well as the role of Internet technology within supply networks. This part provides more discussions on the motivation of this research.

Part III provides a theoretical foundation developed for studying e-supply relationship in the network context. In this part, chapter 4 reviews and discusses the benefits that will be gained to develop a conceptual framework from a multi-perspective approach in this study. Thereby, chapter 5 further discusses the research methods that are employed. A research design is presented in chapter 5 as well.

Part IV describes the case study. Chapter 6 provides a description of the wider network context within which e-supply relationships were taking place. Chapter 7 reviews the adaptation of a new customer service system in TelcoX. The details are presented in this chapter.

Part V consists of chapter 8 to 11. This part summaries the data analysis from four different perspectives, i.e. relationship, cultural, technological and structurational perspectives. It aims at identifying the key emerging concepts and themes in this study.

Part VI offers conclusions and implications for the use of e-technology in the dynamics of business relationships transformation in chapter 12 and chapter 13. Finally, chapter 14 concludes this thesis by presenting self-reflections and a discussion of the indications for further research.

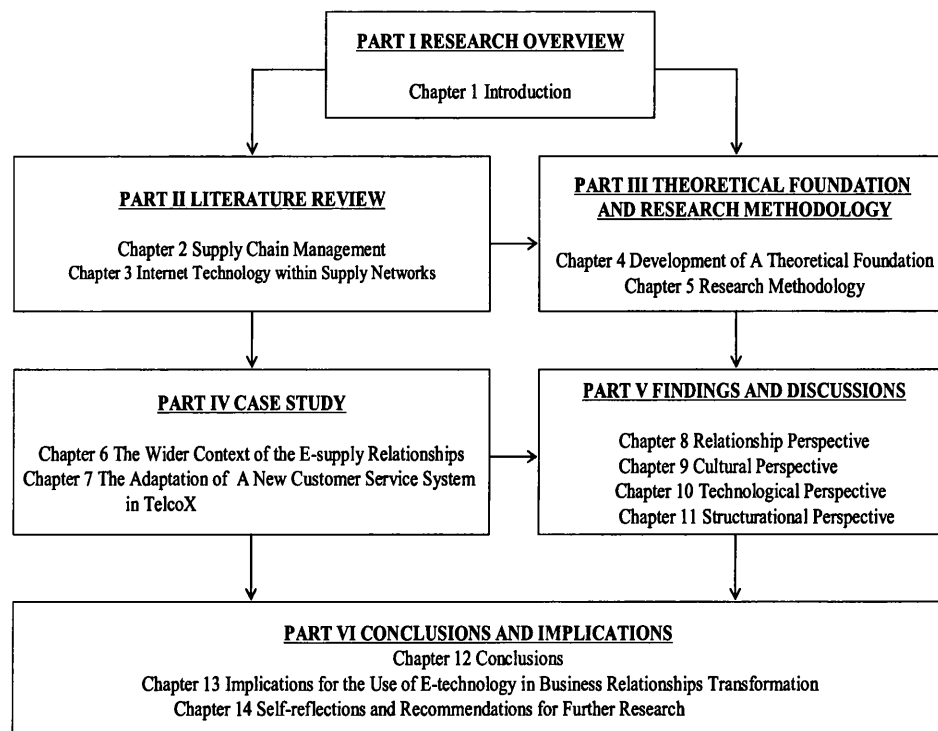


Figure 1.1: Outline of the thesis

PART II LITERATURE REVIEW

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Chapter 2

SUPPLY CHAIN MANAGEMENT

This chapter presents the development of SC concepts. It is composed of five sections. It starts with the definitions of SCM in section 2.1. The purpose of section 2.2 is to provide an overview of the notion of SCM and to create a solid base for understanding the developments of SCM. It covers the main theoretical discussions on networks as well. The most significant concepts and ideas that make supply relationships increasingly important are discussed in section 2.3. Finally, the literature on business contexts within supply networks is reviewed in section 2.4. This chapter ends with a concluding remark in section 2.5.

2.1 Definitions of Supply Chain Management

Faced with a rapidly changing environment, the increasing uncertainties of the global market and the complexity of SCM, many organisations have been forced to rethink their ways of doing business. The role of SCM within and beyond an organisation has been seriously reconsidered. It requires sophisticated manufacturing and distribution processes, along with the co-operation of suppliers and customers. A new understanding of managing supply chains in twenty-first century corporations is needed.

Management of the SC has evolved over the last two decades from an emphasis on integrating logistics and lowering costs to providing better products and services to customers, quickly and cheaply (Evans & Danks, 1998, p. 18). The implementation of SC planning and execution systems requires a total solution to achieve real and practical results. The available literature on SCM is concerned with advocating SCM practices and the improvement in performance brought about by these practices e.g. vertical integration (Clark, 1961; Harrigan, 1983, 1985) and strategic partnership (Balsmeier & Voisin, 1996; Landeros, Reck, & Plank, 1995). Now, it challenges organisations to take SCM

to a more strategic level. Since organisations will no longer compete as individual entities (Beech, 1998, p. 102), they therefore need to look beyond the organisation boundary to a wider context of SC or network. To use strategies to achieve their business objectives, a better understanding of the complexity associated with supply processes as well as managing those processes is needed.

A *supply chain* performs the functions of materials procurement and transformation of finished products to customers (Ganeshan & Harrison, 1995), which concerns both the internal and the external flow of materials and information and focuses on adding value faster than costs. The SC encompasses all the activities associated with moving goods from the raw materials stage through to the end user. It includes a variety of companies, ranging from firms that process raw materials to firms engaged in retailing and wholesaling products. Functions of these firms include procurement, production scheduling, manufacturing, order processing, inventory management, warehousing and customer service.

This understanding of the SCM concept is illustrated in Figure 2.1, which depicts a SC structure that combines not only departments inside the focal company but also tier suppliers and the following customers. Within this model, Cooper, Lambert and Pagh (1997) differentiate between SC components and business processes. It demonstrates the integration of relationship management, service management, demand management, order fulfilment, manufacturing flow, planning and control of activities and the installation of new product development processes across the SC. It is important to note that these key business processes refer to the integrated flows within the company and across the SC.

In this thesis, a SC refers to a chain of organisations linked to each other through the flow of materials, labour and information from the raw material supplier to the end-customer, where an entire SC involving supplier's supplier and customer's customer is taken into consideration. It focuses on the inter-

organisational network rather than the product supply network. This covers the basics of business relationship management discussed in this chapter.

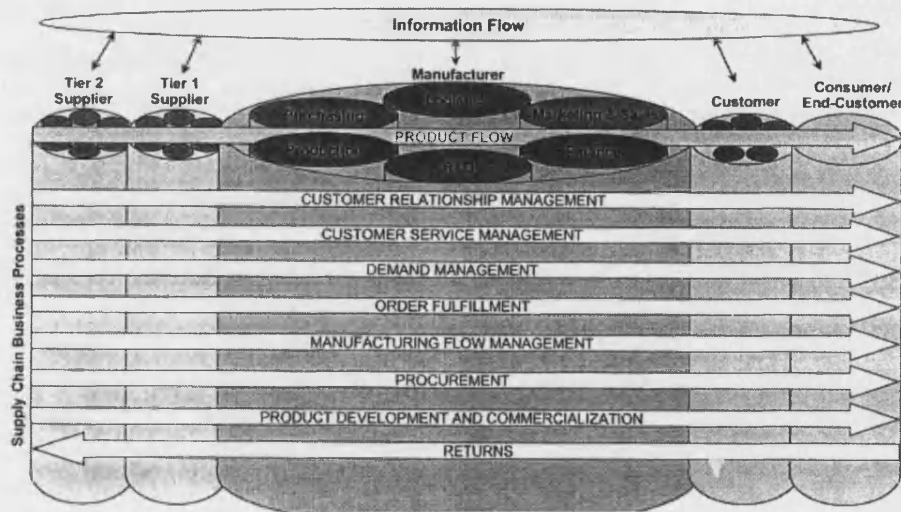


Figure 2.1: Integrating and managing business processes across the supply chain

(Source: Cooper et al., 1997)

2.2 Developments of Supply Chain Management

The term “Supply Chain Management” first appeared in logistics literature as an inventory management approach with an emphasis on the supply of raw materials (Oliver & Webber, 1982, pp. 63 - 75). Christopher (1998) states that logistics is the process of strategically managing procurement, movement and storage of materials, parts and finished inventory (and the related information flows) through the organisation and its marketing channels in such a way that current and future profitability are maximized through the cost-effective fulfilment of orders.

SCM was used originally in the early 1980’s to refer to the management of materials across functions within an organisation (Oliver & Webber, 1982). Oliver and Webber discuss four characteristics of SCM (p. 66):

- SCM views the SC as a single entity. Therefore, it does not delegate fragmented responsibility for various segments in the SC to

functional areas such as purchasing, manufacturing, distribution and sales.

- Supply is a shared objective of practically every function in the chain. It is of particular strategic significance because of its impact on overall costs and market share.
- SCM provides a different perspective on inventories, which are used as a balancing mechanism of last, not first, resort.
- SCM provides a new approach to systems: integration, not simply interface, is the key.

From a strategic perspective, a further development of the concept of SCM is suggested by academics (e.g. Gattorna, 1990; Lee & Billington, 1995; Evans & Danks, 1998). As Lee and Billington (1995, p. 52) state SC analysis is much more than inventory modelling. It can be extended to distribution strategy analysis and to other types of SC problems. Therefore, SCM has a broader scope than traditional logistics approaches to manage the flow of materials and the associated flow of information.

It was quickly extended to cover organisational relationships with suppliers and customers in the 1990s, the idea being that working more closely and co-operatively with these counterparts would enable a kind of integration and co-ordination that would lead to reduced inventory, better quality and delivery performance and reduced cost for every organisation involved. With the growing importance of SCM, purchasing plays an increasingly strategic role in promoting cross-functional and intra-organisational relationships (Porter, 1985; Ellram & Carr, 1994).

Later, SCM became accepted on a wider basis. As a more holistic concept, SCM is a collaborative-based strategy to link inter-organisational business operations to achieve a shared market opportunity (Bowersox, Closs, & Stank, 1999). The concept suggests that the company's focus extends beyond its own performance to become much more of an inter-organisational focus. Therefore, it extended to incorporate external and direct suppliers, gradually altering the

focus to include indirect suppliers. Moreover, SCM has received operations management attention to address the strategic alignment of operations and markets (Pannirselvam, Ferguson, Ash, & Siferd, 1999), to underpin value systems (Porter, 1985) and to develop models for gaining and sustaining competitive advantages (Lewis, 2000, 2003b).

Around 2000, the perspective shifted from the producer to the end customer, thereby focusing on end customer satisfaction rather than satisfaction of any one actor within the chain (Harland et al., 2002). Christopher (1992, pp. 12 - 16) states that SCM is the management of upstream and downstream relationships with suppliers and customers to deliver superior customer value at less cost to the SC as a whole. Cox and Lamming (1997, p. 48) lead this to a new management concept and define it as ‘the strategic management of external and internal resources and relational competencies in the fulfilment of commitments to customers.’

2.2.1 Concept of supply network

Recently, the term “supply network” has been suggested as a more appropriate term for the complex process of supply. Harland (1996) defines a supply network as a set of SCs, embodying the flow of goods and services from original sources to end customers. Lamming et al (2000) propose that supply networks may be seen as an extension of SCs, seeking to explain the commercial complexity associated with the creation and delivery of goods and services from the source of raw materials to their destination in end-customer markets. This view highlights the importance the customer needs and the strategic nature of SCs. It perceives supplier relationships as indistinguishable from customer relationships. Each organisation plays several roles simultaneously in a supply network.

In the earlier studies, various concepts of the strategic network have been presented. The idea of value system is introduced by Porter (1985). Porter (1985, p. 34) uses the notion of value system for a wider stream of activities

including suppliers and buyers. The value system analysis describes the activities the organisation performs and links them to the organisations' competitive positions. Porter (1985) argues that the ability to perform particular activities and to manage the linkages between these activities is a source of competitive advantage. A firm's value chain is a part of a larger system including the value chains of upstream suppliers and downstream buyers. Linkages exist not only in a firm's value chain, but also between firms' value chains.

Therefore, the development of a competitive advantage depends not only on a firm-specific value chain, but also on the value system of which the firm is a part. Similarly, Jarillo (1988) defines that strategic networks as long term, purposeful arrangements among independent firms that allow them to gain or sustain competitive advantage vis-à-vis their competitors outside the network. From a marketing perspective, Campbell and Wilson (1996) define a value-creating network as a series of dyadic and triadic relationships that have been designed to generate customer value and build sustainable competitive advantage.

A different view of the network is apparent in a body of literature, notably, a group of research analysts that has inspired the supply network idea, is in industrial network research. From a marketing perspective, an Interaction Model (Håkansson, 1982) is developed to understand the interaction process in dyadic relationships and the embeddedness of these in industrial networks that focus on long-term mutually beneficial relationships and the adaptation processes that occur within them. A detailed review of this model will be provided in chapter 4.

Another model of the industrial network (see Håkansson & Snehota, 1995) is proposed as actors, resources and activities (A-R-A). According to the A-R-A model, any relationship consists of a combination of activity links, resource ties and actor bonds that together with other relationships form network structures. Business relationships are outcomes of interaction processes where different

actors try to influence one another. To develop a relationship, Ford and his colleagues suggest that organisations must consequently look at this in a larger context to see how it affects a larger activity pattern, resource constellation and web of actors (Ford et al., 2002, p. 45). Thus a company's network position is defined by the characteristics of the company's relationships and the benefits and obligations that arise from them.

It appears from the above review, different approaches are adopted for network studies. Indeed, Harland (1996) suggests that the study of network can be carried out from the perspective of the participants (firms or individuals), activities or processes and resources.

2.2.2 Theoretical discussions on networks

To study the networks, many studies draw on different concepts, frameworks and models as their theoretical lenses. The most popular metaphors used for industrial networks are networks as structures, positions, processes and relationships (Easton, 1997). Based on the above four metaphors, this section reviews further the theoretical discussions on networks.

Networks as structures

Easton (1997, p. 112) explains that networks will have structure if the firms in an industrial system are interdependent rather than independent. The greater the interdependence the clearer the structure of the network becomes and the more important it is in determining the behaviour of individual firms. This idea can be gained from the case studies on management of the value chain in consumer electronics (Ebeling & Doorley, 1983) and drugs and health care products (Johnston & Lawrence, 1988). Figure 2.2 shows the value-added chain for packaged foods.

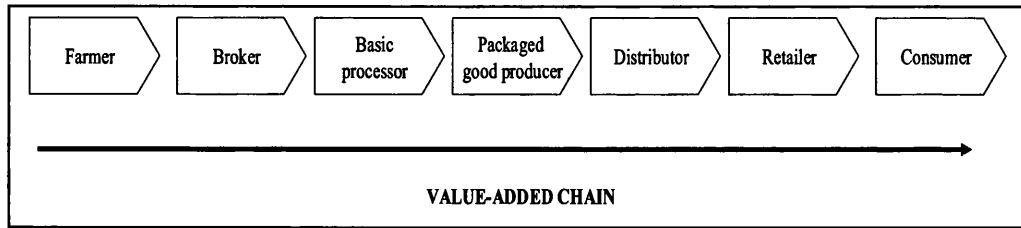


Figure 2.2: Value added chain for packaged foods

(Based on Johnston & Lawrence, 1988)

Mattsson (1987, p. 241) has applied four dimensions to describe network structure. Structuredness refers to the general level of interdependence in a network. In a tightly structured network, firms have strong bonds and a clear division of work activities. In contrast, loosely structured networks feature a low interdependence between firms, unclear roles in terms of functions performed and weak bonds. Homogeneity refers to the similarity of firms in terms of their bond types and strength; the relative importance of the firms with a specific type of function each firm may undertake. Hierarchy is used to indicate the extent to which a few firms have a dominating influence over other firms. Exclusiveness refers to the interdependence between positions in the network and positions in other networks.

Networks as positions

Network as a position perspective represents a different level of analysis. Mattsson (1987, p. 236) explains that the whole industrial system can be regarded as a very complex network of relationships between firms. Each firm has direct or indirect relations to the other firms. The micro-level and macro-level positions have been distinguished in Mattsson's study. The former describes a firm's relationships to another individual firm. The latter refers to relationships between individual firms and several firms in the network. Taking the research approach to the SC study, Harland (1996) distinguishes four levels of complication as illustrated in Figure 2.3. The levels describe SC integration.

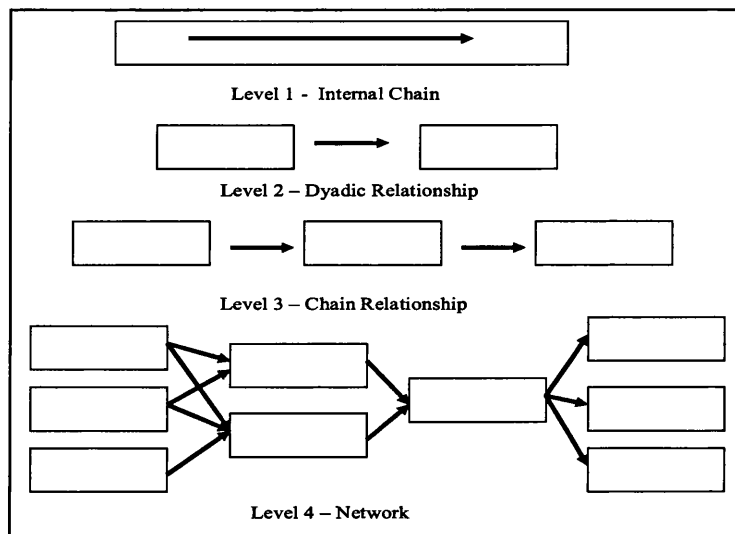


Figure 2.3: Four levels of research in SCM (Based on Harland, 1996)

- Level 1 - Internal chain focuses on the internal flow of materials and information within one specific organisation, for example, a service provider
- Level 2 - Dyadic relationship is a single one-to-one relationship. It refers to the relationship between two organisations, e.g. a supplier and a customer
- Level 3 - Chain relationship includes the supplier's supplier and/or customer's customer
- Level 4 - Networked organisations involve in the provision of a product or service required by the end-user, which participate in a specific part of the economy

Networks as processes

Easton (1997, p. 117) argues that the network process, a form of co-ordination, emerges in the strong inter-organisational relationships. Network processes are dominated by the distribution of power and interest structures. The power/interest distributions dictate the way in which the network both operates and develops. It represents network transformation over time. Easton states that networks are stable but not static; stability provides a platform for change.

that of another) and other non-linear facets which deny the convenience of thinking in simple terms. Therefore, a SC deals with total intra- and inter-business process integration and management. It represents a new way of managing the business and relationships with other members of the SC (Harland, 1999). Since this thesis is concerned with the supply relationships, therefore, this study draws on 'networks as relationships' as the theoretical lens.

2.3 Supply Networks as Supply Relationships

From different disciplines, different types of relationship have been defined in earlier studies (Blois, 1972; Richardson, 1972; Johnston & Lawrence, 1988; Aoki, Gustafsson, & Williamson, 1990; Ellarm, 1991; Christopher, 1992; Lamming, 1993; Macbeth & Ferguson, 1994). Based on different business trends, supply relationships are discussed here including the vertical integration, partnerships and lean supply.

2.3.1 Vertical integration

Grossman and Hart (1986) define a firm being composed of those assets that it owns or over which it has control; a firm is vertically integrated if it owns assets used at successive production stages. They view that a firm owns the output for two successive processes and emphasise the ownership over the use of physical assets. A complete treatment of vertical integration requires the limits as well as the powers of internal organisation be assessed (Williamson, 1971).

Riordan (1990) shifted the focus towards the notion that firms are best viewed as a "nexus of contracts" (see Williamson, 1990; Reve, 1990) and defines that vertical integration is the organisation of two successive production processes by a single firm (Riordan, 1990, p. 94). This definition emphasises the process whereby different aspects of a business, 'upstream' and 'downstream' are brought together. It views that a firm organises a production process and owns the resulting output. This is where a firm merges or takes over other firms in the same SC.

Vertical integration may arise from the role of uncertainty in the supply of the upstream goods (Arrow, 1975), or from informational factors producing contracting difficulties when the parties are separate and independent (Williamson, 1985), or may result from the relation between product innovation and institutional design (Lundgren, 1993). Vertical integration leads to the development of an organisation's in-house capabilities (Araujo, Dubois, & Gadde, 2003). Reve (1990) argues that economies of integration can often be more efficiently obtained through vertical corporate agreements than through vertical integration by ownership. This insight allows a range of possible external contractual relationships to be developed (Cox & Lamming, 1997). With this interpretation, Cox and Lamming (1997) point out the importance to view firms not as fixed entities, existing as objects within a static market structure, but as potentially fluid and flexible constructs whose internal structures and external boundaries may change as circumstances dictate and opportunities require.

2.3.2 Strategic partnering

Partnership refers to a relationship that attempts to build interdependence, enhance co-ordination, improve market position focus (by broadening or deepening), or achieve shared goals; and that entails sharing benefits and burdens over some agreed time horizon (Cooper & Gardner, 1993). Gentry (1996) states that a strategic partnership between any two organisations can be viewed as a segment of an extended SC, and the objectives of the SCM approach will be enhanced as more organisations within the SC develop partnerships.

Since it is not effective for organisations to go in all of their activities alone, more and more organisations are placing an emphasis on pursuing growth strategies that involve strategic partnerships. Johnston and Lawrence (1988) regard partnering as “value-adding partnerships” – “a set of independent companies that work closely together to manage the flow of goods and services

along the entire value-added chain.” Therefore, in a SC, strategic partnering occurs when two or more organisations establish a relationship that combines their resources, capabilities, and core competencies for their business needs. So that organisations can profit mutually from shared knowledge, skills, manufacturing capacity, distribution channels, and access to markets or technological developments. However, it emphasises co-operation, not competition and conflict, between those parties as the basis upon which a joint competitive advantage is developed.

Lamming (1993, pp. 168 - 173) contends that the main features of partnerships include supplier tiering, elimination of the enquiry and competitive tendering processes, more sophisticated costing processes, constant exchange of data, sourcing policies, co-ordinated capacity planning and just-in-time (JIT) deliveries. He argues that partnership is the reverse of many features of the traditional relationships and naturally challenges customers to co-operate with suppliers. For example, sourcing through traditional competitive bidding is inappropriate in a partnership. Also, the complexity of the partnership relationship and its dependence upon commitment from both suppliers and customers leads to a high level of pressure to perform. This type of ideal relationship is however possibly not achievable (see Spiers, 1997). Thus, a further development of partnership-type relationships is required. Building on the experience of a number of globally competitive automobile component suppliers, Lamming creates the lean supply model that goes beyond partnerships (Lamming, 1993, p. 238).

2.3.3 Lean supply

The idea of “lean supply” (Lamming, 1993) is adopted from the concept of “lean production” (Womack, Jones, & Roos, 1990). Although it was coined to describe the management approach used by the Japanese automobile manufacturer – Toyota in its production and supply, it is not about cars, nor is it solely about manufacturing. It is a flow of value unencumbered by hesitation, deviation or repetition (Cox & Lamming, 1997). Lamming (1993, pp. 178 - 211) explains and deeply discusses the lean supply model by providing a

thorough examination of the issues facing organisational supplier-customer relationships. He also suggests various strategies (see pp. 212 - 237) that may be implemented to develop and improve the relationships for both suppliers and customers.

Since the needs to provide all the services require firms to grow and acquire the appropriate resources (Lamming, 1993), firms will need to enter into closer relationships between customers, suppliers and other relevant parties including competitors. Lamming (1993) says that competition in lean supply thus includes collaboration with competitors and between customers and suppliers. He summarises the lean supply as the product of an operating attitude that recognises the cost associated with any departure from perfect execution of the tasks necessary to provide long-term customer satisfaction, thereby achieving total eradication of those costs (Lamming, 1996).

Thus this relationship becomes a “quasi-firm” (Blois, 1972; Luke, Begun, & Pointer, 1989) within which two or more organisations collaborate on activities towards its strategic purposes. The challenge of lean supply is to redesign the way in which responsibility for value management is shared. In order to achieve true lean supply, the people working in the relationship need to be more concerned with their immediate working environment (the relationship itself) than with that of the specific customer or the supplier, either of which might be legally their employer (Lamming, 1993).

The lean supply model adds to the earlier concept by positioning component suppliers as equal technology partners with the assembler and global competitors in their own right. The development of lean supply contributes to the theories relating to the inter-organisational relationships and provides a strategic framework for managing the supply relationships.

2.4 Business Contexts within Supply Networks

Due to the effects of increasing product/service complexity as well as IT innovations, supply networks are becoming complex, dynamically changing webs of relationships (Harland, 1996). Consequently the focus has shifted from

the competitive advantage of firms to competitive advantages of entire SCs (Kumar, 2001). Whilst this complexity of supply networks arises from many sources and influences, Harland and Brenchley (Harland & Brenchley, 2001) outline some key drivers of this complexity, such as outsourcing and globalisation.

2.4.1 Outsourcing

Outsourcing can be loosely defined as “the purchase of a good or service that was previously provided internally” (Quinn & Hilmer, 1995). Its practices have evolved in several ways over the last few decades. It involves the use of specialists to provide competence, technologies and resources to the parts of the whole (Ford, Gadde, Håkansson, Ludgren, Snehota, Turnbull, & Wilson, 1998; Gomes-Casseres, 1994; Knight & Harland, 2000; Lonsdale, 1999). The basic idea is that if an organisation does not specialize in a certain function it will be beneficial to transfer control of the function to a specialist organisation that will be able to offer better cost and quality (Clott, 2004). While, there are substantial risks associated with the transfer of business critical functions to a third party service provider.

Outsourcing is viewed as a management tool to assist organisations in developing a strong foundation for achieving their business objectives. The global business environment, with its trend towards managing key competencies, has created a preference for outsourcing (Rich & Hines, 1997). Not just outsourcing the procurement of materials and components but also outsourcing of services that traditionally have been provided in-house (Christopher, 1992, p. 122). Whether they should do something new cannot be based upon what the organisations have traditionally done, but what is demanded by customers – instant acquisition of new or heightened skills may be necessary, and only possible via outsourcing (Cox & Lamming, 1997).

Therefore, high costs, internal weaknesses or shortage of resources and limited capacity may exist as outsourcing opportunities. Wilding and Juriado (2004)

summarise the main reasons for outsourcing that are identified in the previous research: (a) cost reduction; (b) improvement of service levels; (c) increase in operational flexibility; (d) focusing on core competencies; (e) improvement of asset utilization; and (f) change management.

What is considered to be “core” and “non-core” competencies (Fitzgerald, 1995) is the main issue in outsourcing. Core competencies are deemed essential to own in order to compete in a market; and, by process of elimination are non-core competencies (Cox & Lamming, 1997, p. 37) giving organisations the best return on their investments. Non-core competencies have been seen as appropriate activities to ‘outsource’ to other organisations (Snow, Miles, & Coleman, 1992). Organisations are suggested to focus on what they do best by using inter-firm contracting (Williamson, 1990; Reve, 1990) to get the lowest cost. Clearly, organisations’ decisions on outsourcing their business activities should be made on whether the activities would require excessive investments by doing them in-house themselves.

2.4.2 Globalisation

It is widely recognized that the world is becoming increasingly interconnected in terms of its economic, political and cultural life (Walsham, 2000, p. 291), many analysts use ‘globalisation’ with respect to certain specific forms and argue that different things are being globalised, i.e. product, market, production, and capital (see Oral & Kettani, 1998). The features of globalisation are generally agreed as (Schaeffer, 2003, pp 2 – 3): (1) The growth and spread of investment, capital, money, and financial services; (2) The expansion of trade; (3) The migration, relocation, and reorganisation of private businesses, and the farms and factories controlled by them; (4) The invention and diffusion of new technologies, particularly of high-tech electronic and biochemical tools, techniques, and services; and (5) Democracy. However, some scholars like Schaeffer (2003) argues that the development of culture, such as cross-cultural working, should also be identified as an important aspect of globalisation.

The trend towards globalisation has actually been growing rapidly for some years. "Globalisation" distinguishes global and traditional international businesses (Harland, Lamming, & Cousins, 1999). Globalisation is a historical process moving at different speeds in different countries and in different sectors. It can be considered as a process resulting from collaborating to achieve similar objectives (Dutta & King, 1980), getting organised to pursue the same goals or ideals with others on a world wide scale (Karnani, 1982), or performing joint activities (Barlow & Roberts, 1996). The increasing transnational mobility of capital, information, people, products and services is leading to "global entanglements" (Fombrun & Wally, 1992).

The emerging global trend, the competitive pressures and the necessity of considering markets from a global perspective urge companies to find their sources and deliver products or services on a global basis. Oral and Kettani (1998) explain that a global market is the one where products of all kinds and from all parts of the world can easily be imported to and also accepted and bought by its local habitants and visitors. There are certain conditions needed to be satisfied by a market labeled as "global", such as nonexistence or low level of customs duties and taxes (Dutta & King, 1980), openness of the habitants and visitors to the market to buy products coming from different countries (Karnani, 1982) high level of buying power of the habitants and visitors of the market (Karnani, 1984), high level of acceptance of convertible foreign currency (Karnani, 1985), political and economic accessibility of the market to all producers from all nations (Barlow & Roberts, 1996), efficient and effective banking and financial service system (Korten, 1996).

Globalisation manifests itself in intensified competition among firms and in the creation of new industry structures. Clott (2004) points out that the changing nature of competition has resulted from globalisation and technology developments that have changed basic business processes related to time and distance. The process of globalisation therefore dramatically alters the conditions of competition and relationships between companies who are increasingly conducting business across countries. Companies are increasingly

required to work in global markets but still deal with the uniqueness of local requirements. The dynamics of globalisation and organisational relationships considerably shape the nature and corporate culture of organisations (Oral & Kettani, 1998).

Since many businesses engaged in economic transactions with geographically distant countries, Lanzalaco and Gualmini (2000, p. 179) argue that the local prerequisites of global competition should give more attention even if the main effects of globalisation shift the sites of economic and political decision-making beyond national borders. Oral and Kettani (1998) argue that a multiple-criteria decision-making context where there are several stakeholders with different values and preferences, and probably with some conflicting objectives, is required. This decision context must also overcome distance and time barriers in order to become efficient and effective. While cross-cultural awareness certainly helps global managers avoid making mistakes resulting from cultural myopia, the situation global companies face is much more complex (Saner , Yiu, & Sondergaard, 2000).

Thus, the growing global market, with its multiple local options, rapidly changing technologies resulting in expanding needs of diverse customers and the trend of channel distributors towards customised channel brands, drives companies to offer proliferating product options (Lee, 1998, p. 77). The globalising of industrial activities has become a major issue. However, Christopher (1992) states that world markets are not homogeneous; there is still a requirement for local variation in many product categories. He raises the questions on how to offer local markets the variety they seek whilst still gaining the advantage of standardized global production, how to manage the links in the global chain from sources of supply through to end users. Local markets challenge organisations in doing business in today's global environment.

More importantly, the role of technology is very important in this context, particularly evident in the SCM. It helps to establish new supply relationships within which organisations can share information through new channels, upon a

common platform, provided by the Internet (Rutner, Gibson, Vitasek, & Gustin, 2001). Internet technology leads to SC restructuring and is increasingly an enabler in facilitating globalisation. Damanpour (2001) says that the Internet has changed the way companies communicate, how they share information with business partners, and how they buy and sell. It has also changed the way they view their Internet technology investments. Under the SC model, Internet technology therefore becomes more necessary for effective operation in the network environment.

2.5 Concluding Remark

This chapter has described how the concepts of SCM and ideas associated with managing SC develop. It can provide a base for understanding an establishment of a SC strategy. As SCM has evolved from a cost focus to a customer focus and then to a strategic focus, the need to think strategically about it has never been greater (Evan & Danks, 1998, p. 36).

Since companies look beyond their borders and develop business relationships or form alliances with their business partners to enhance outcome, many are taking a new look at the roles they play in various processes in a SC. From a strategic view, effectively managing supply relationships has the potential to provide significant benefits to organisations in developing, maintaining and improving competitive advantages. It also represents a significant opportunity for organisations to simplify their SC operation processes.

Chapter 3

INTERNET TECHNOLOGY WITHIN SUPPLY NETWORKS

This chapter is concerned with the impact of Internet technology within supply networks. Section 3.1 presents the importance of the B2B e-commerce in SCM. The role of Internet technology within supply networks is discussed in section 3.2. Section 3.3 reviews the forms of Internet technologies and applications used in SCM. Current use of Internet technologies in supply networks is provided in section 3.4. Section 3.5 provides a concluding remark that emphasises the importance for organisations to gain experience on how to effectively implement and use of Internet-technology for supporting various forms of global work in the future.

3.1 B2B E-commerce

The changes in ITs of the past two decades have affected organisations and markets by changing the basis of competition (McFarlan, 1984), involving networks that transcend organisational boundaries (Barrett & Konsynski, 1982; Cash & Konsynski, 1985), and transformation the nature of products, processes, companies and industries (Porter & Millar, 1985). Towards the end of the 1980s, the studies on the impact of the information revolution on intra- and inter-organisational relationships emerged. Malone, Yates and Benjamin (1987, p. 496) argue that ‘by reducing the cost of co-ordination, ITs will lead to an overall shift toward proportionately more use of markets rather than hierarchies to co-ordinate economic activity.’ Child (1987) explores the contribution of ITs towards the different modes of organising transactions that are being adopted within the contemporary strategic context of mature economies. Benjamin and Morton (1988) rate that strategic advantage is often provided by the ability to restructure through the power of electronic integration. Therefore, it is evident

that the radical changes in ITs have enhanced business-to-business (B2B) e-commerce.

B2B e-commerce is defined as an SC innovation that generates cross-firm process integration (Claycomb, Iyer, & Germain, 2005, p. 222). It uses the World Wide Web to secure the trading of goods, information, and services before, during, and after the sale (Barnes-Vieyra & Claycomb, 2001). E-commerce confines itself to any form of exchange between actual and potential organisational suppliers and customers via an electronic medium (Easton & Araujo, 2003, p. 432). The forms of e-technologies have been summarised by researchers, which can include EDI, ERP, e-procurement, E-marketplaces and E-collaboration (Harland et al., 2002), or fax, email, Intranet, Internet, and static and mobile telephony (Easton & Araujo, 2003), or Web- and Internet-based applications (Claycomb et al., 2005).

With the emergence of a new type of markets for conducting business through e-technology, it introduces new issues for detailed study. Croom's study (2001) concerns the impact of electronic forms of conducting B2B transactions. Easton and Araujo (2003) discuss contingency issues of the relationship between two types of e-technology (virtual marketplaces and inter-organisational systems) and two kinds of B2B markets (competitive and relational). They suggest that e-technology adoption depends upon the characteristics of B2B markets in particular situations. For example, virtual marketplaces will act as a channel for the firms whose products are of standard specification, low value and not essential. In contrast, complex and differentiated inter-organisational systems are more likely to be adopted in the relational market where characteristics of a small number of buyers and sellers exist in long-term relationships. Thus, approaches to e-technology adoption should be contingent and dependent upon specific contexts.

In today's business environment, Internet technology therefore plays an important role within supply networks while it emerges as important in B2B e-commerce transaction platforms.

3.2 The Role of Internet Technology within Supply Networks

As reviewed earlier, B2B e-commerce has changed the manner in which cross-firm transactions are conducted, resulting in lower costs and improved SCM (Claycomb et al., 2005). Technological change via Internet plays an important role in altering industry boundaries with increasing service, computers and telecom (Porter, 1985, p. 175). The use of Internet technology not only makes it possible for information integration that enables firms across the SC to share useful information (Evans & Danks, 1998, p. 29), but also enables IS that are re-shaping the organisation and the nature of the linkages between organisations. As Porter (1985, p. 168) puts in “the rapid technological change IS is having a profound impact on competition and competitive advantages because of the pervasive role of information in the value chain.”

Since Internet technology is providing the driving force for competitive strategy (Christopher, 1992, p. 169), as a key strategic asset (Beech, 1998, p. 101), organisations have developed a number of Internet technology-based initiatives to develop competitive advantages (Porter, 1985; Beech, 1998) while exploiting the marketing opportunities. They are involved in considerable changes and much of the technology of organisations actually exists in business relationships, relations act as pipelines bringing the Internet technologies of the two organisations together (Ford et al., 2002). Porter (1985, p. 171) argues that a firm’s technology is often interdependent on its buyer’s technology, and technological change by the buyer can affect competitive advantage just as can technological change within the firm. Internet technologies provide better opportunities for companies to establish distinctive strategic positioning than did previous generations of ITs (Porter, 2001).

Consequently, the networked SCs are changing dramatically. Ford et al (2002) argue that these changes involving building relationships and acquiring resources or technologies. It will affect the organisation’s current relationships and position. Thus, the organisation’s own developments are related to the

developments elsewhere in the network that changes can occur at any point and affect even distant companies through the inter-connections of relationships (McAuley, 2001).

3.3 Forms of Internet Technologies and Applications

SC solutions such as EDI and ERP have been helping to manage operations for participants across the value chain for many years. Some major forms of Internet-based e-business and CRM solutions, including e-procurement, e-auctioning, order catalogue systems, e-marketplace, e-collaboration and web-hosted solution add great capabilities to SC execution by enabling added richness, timeliness, and security to mission-critical interactions (Harland et al., 2002). Table 2.1 summaries the SC solutions, the different types of e-interactions in SCM, the purpose, the nature and characteristics of the e-interaction for each type of e-technology and application.

EDI

EDI was invented when network bandwidth and processing power were both scarce and expensive compared to human costs (Brockmann, 2003). The idea behind EDI is that it would allow retailers and manufacturers to communicate seamlessly, accurately and without much human intervention (Zimmermann, 2003). Easton and Araujo (2003) explain that EDI is set up through proprietary value-added network systems providers. It makes electronic inter-firm communications and exchange transactions available.

The EDI systems have been used in the exchange of purchase orders and invoices electronically for better inventory management and demand forecasting (Eng, 2004). Gattorna (1990, pp. 7 – 8) says that utilizing EDI between the organisation and key suppliers can provide substantial cost savings. Similarly, the use of EDI between manufacturer and customer can provide inventory and order cycle timesaving for the customer, which enhances the customer's competitive position. Sharing the value-added benefit

throughout the distribution channel helps to foster a spirit of partnership, and creates high switching costs for customers and effective entry barriers against competitors. Although it challenges organisations to address the variety of needs identified by suppliers or customers and to ensure internal data is organised effectively.

Currently, web services are used primarily for internal communications within organisations. It has been predicted that by 2010 it will underpin external online services for customers (Huber, 2004). Zimmermann (2003) explains that one of the biggest benefits of Internet-enabled data exchange is the ability to bring many of the features and functions of EDI to small and medium enterprise (SME) retailers. However, most troublesome to EDI is the proliferation of new EDI formats or standards clogging a system where there has never been global compatibility (Zuckerman, 2004). Although there are ongoing efforts to build acceptance for the international EDI standard, it still needs to meet the specific needs of different countries and markets.

ERP

Over the last decade, it has been seen that a number of organisations have implemented ERP systems, which can significantly increase the availability and reliability of activity cost-driver information (Baxendale & Jama, 2003). The development of ERP has brought about a new and more complex set of e-commerce technological opportunities and challenges (Easton & Araujo, 2003). Traditionally, ERP tools were not considered under the umbrella heading of SCM tools (Gattorna, 1998). However, many manufacturers now view ERP systems as the core of their IT strategies on which to build their SCM solutions. Sweeping advances in technology, ERP systems have been expected to link core business processes by combining functions such as order management, production planning, inventory control, purchasing, sales and distribution, human resource management and accounting within one integrated software suite (Baxendale & Jama, 2003; Michael, 2001). The current versions of ERP successfully automate internal processes and provide a solid foundation on which to build (Gattorna, 1998). ERP systems emphasise planning and the use

of a relational database permits functionalities to share information without re-entering the data or duplicating the data in databases throughout the companies. Thus, with its fully integrated ERP systems, companies can manage to increase their business efficiency and improve effectiveness.

Based on the recent research, the ERP users have gained experience with upgrades (Swanton, 2004). Swanton (2004) says that any upgrade of a large ERP system is a significant investment that must deliver business value, requiring careful co-ordination of upgrades with business change and expansion to avoid projects that deliver little or no return on investment. Therefore, an investment in ERP systems can provide the promise of a competitive advantage through better access to information and the integration of processes (Gowigati & Grenier, 2001). ERP software manufacturers have been quick to integrate business functionalities into existing SC systems. However, the key is not only to link and integrate cross-company processes but also to synchronize and speed up the execution of all SC transactions.

Gowigati and Grenier (2001) analyse that the primary difficulty of the majority of ERP are at the implementation stage. In most cases, the large organisations that have gone through a major ERP implementation report including the political and change management issues that are the most difficult to identify and to solve. In addition, most challenges with ERP implementations are not technical in nature; they revolve around the human and organisational change aspects, and resistance to these changes is inevitable. Therefore, Gowigati and Grenier suggest that the key to success is to position the ERP program as a strategic initiative conducted by strong and respected business leaders, not as a technical effort driven by IS/IT specialists.

E-procurement

As e-commerce begins to take shape the world over, more organisations are opting to purchase goods and services through the Web. An e-procurement B2B system is an open system that enables the organisation to reach and transact with suppliers and customers in virtual markets (Bakos, 1997). It not only

allows buyers to make the best purchasing decision while e-enabled suppliers may enjoy wider access to market segments across the world, but also allows qualified local suppliers to automatically access new markets (see Foo, 2003). Moozakis (2001) claims that investments in e-procurement technology are rising faster than investments in any other software category as companies emphasise cost savings. E-procurement tools are built into modern versions of ERP and financial management software that allow the automatic initiation of orders follow a link with an inventory system, the authentication of suppliers, and the issue or payment of invoices and financial transactions (Bland, 2003). With the introduction of cheaper web-based B2B e-commerce technologies, online procurement has today become commercially feasible (Datamonitor.com, 2000).

According to Sain, Owens and Hill (2004), e-procurement can be considered as “the electronic integration and management of all procurement activities, including purchase request, authorisation, ordering, delivery and payment between a purchaser and a supplier.” It represents a substantial competitive advantage when implemented seamlessly. From a buyer’s perspective, the advantages of e-procurement depend on the buying situation, the strategic importance of the product, and the existence of international standards for the product. It needs to be implemented at an organisation-wide level, rather than in an individual department.

E-procurement offers electronic purchase order processing and enhanced administrative functions to buyers and suppliers, resulting in operational efficiencies and potential cost savings (Panayiotou, Gayialis, & Tatsiopoulou, 2004). The recommended purchasing practices include e-tendering and e-auctions (Harland et al., 2002). Vowler (2004) explains that in e-tendering, all the tender documents are available online and the bidders deal with all the questions online. The information is then collected electronically and the tenders are submitted electronically. This takes out all the paperwork and makes it much easier to compare bids. While in an e-auction, a number of suppliers with the authorities, terms and conditions have probably already to be

dealt with. On the day of the auction they all go online and bid e-procurement provides better returns on investment, with relatively little risk for companies which Web-enabled their buying function.

E-marketplaces or E-hubs, eXchange

An e-marketplace is defined as a many-to-many, web-based trading and collaboration solution that enables companies to buy, sell, and collaborate on a global scale more efficiently (Eng, 2004). It can be viewed as an IT-facilitated market (Bakos, 1998) that allows companies that participate in e-marketplaces, obtain financing and settle transactions over the Internet in real time. The online marketplace provides a neutral and anonymous trading environment, and hosts auction sites, component and equipment exchanges and online catalogues (Roos, 2001).

The core service of e-marketplaces is to provide a central market space, where e-commerce can be conducted (Brunn, Jensen, & Skovgaard, 2002). It is claimed that e-marketplaces would help their members capture huge SC savings by using the Internet to deliver services such as logistics more effectively and at lower cost (Cottrill, 2002). Roos (2001) states that many e-marketplaces or exchanges for the electronic components industry believe they complement the traditional distribution model by providing sourcing services for parts that fall out of the contract purchase. However, many enterprises underestimated the complexities of SCM. E-marketplaces are creating opportunities for companies to improve their procurement and sales processes, but they also create credit and settlement risks for buyers and sellers that financial service companies are well suited to solve (see Roth, 2001). In addition, Day, Fein and Ruppertsberger (2003) argue that the exchanges in business markets provided very little value; it has hardly been a success.

Therefore, large e-marketplaces have learned the lesson and have focused on the nitty-gritty issues such as transaction efficiency and ensuring that the business members want to be part of are actually available (Cottrill, 2002). By

offering competitive advantages to large suppliers, e-marketplaces will continue to mature by overcoming many of the obstacles if companies understand what these networks offer and what they demand in return.

E-collaboration

“E-collaboration” is defined as ‘collaboration among individuals engaged in a common task using e-technology’ (Kock, Davison, Ocker, & Wazlawick, 2001, p. 1), which are ‘B2B interactions facilitated by the Internet’ (Johnson & Whang, 2002). Johnson and Whang (2002, p. 420) argue that these interactions go beyond the simple buy/sell transactions and may be better described as relationships, which include such activities as information sharing and integration, decision sharing, process sharing, and resource sharing.

In a traditional vision of the SC, demand flows up from each trading partner to its upstream trading partner and products flow in the opposite direction (Ovalle & Marquez, 2003). The need of certain co-ordination among the organisations which are participants in a SC, should be translated into process and functions integration within these organisations and along the entire SC (Cooper et al., 1997).

Although the term “e-collaboration” has gained attention only in recent years (Ovalle & Marquez, 2003), various forms of SCM using IS have been around for over 20 years, such as EDI and Electronic Funds Transfer (EFT) technologies which were first introduced in the late 1970s (Adam, Dogramaci, Gangopadhyay, & Yesha, 1999). E-collaboration software lets users visualize, manipulate, and share files and documents for group viewing and feedback (Schut, 2003). Applying e-collaboration technology in a global context introduces even more challenges in the form of larger diversity in organisational practices, culture and technical infrastructure (Munkvold, 2005). However, Munkvold (2005, p. 78) argues that companies are still in the early stages of gaining experience on how to effectively implement and use e-collaboration technology for supporting various forms of global work.

Type of e-Technology and application	Purpose	Nature and characteristics of e – Interaction
EDI	<ul style="list-style-type: none"> • Transactions 	<ul style="list-style-type: none"> • Inter-organisational information system • Proprietary / private & expensive • Web-based EDI
ERP	<ul style="list-style-type: none"> • Used for a materials planning and controlling system 	<ul style="list-style-type: none"> • Internal
e-Procurement (e-tendering, order catalogue, e-auctions, etc)	<ul style="list-style-type: none"> • Automate purchasing processes • Reach potential suppliers and buyers 	<ul style="list-style-type: none"> • Web-enabled software system
e-Marketplaces or e-Hubs, eXchange	<ul style="list-style-type: none"> • Three potential functions: identification, selection and execution • Lower transaction costs and increased market coverage 	<ul style="list-style-type: none"> • Virtual marketplaces/ hubs
e-Collaboration	<ul style="list-style-type: none"> • Multi-functions, i.e. CAD/Collaborative design, collaborative planning 	<ul style="list-style-type: none"> • Higher degree of electronic integration and collaboration • e-Supply network

Table 3.1: Summary of different types of e-Interaction in supply management

(Source: Harland et al., 2002)

3.4 Current Use of Internet Technology within Supply Networks

In meeting SC needs and fulfilling organisational requirements, a firm's technology strategy becomes critical. According to Porter (1985, p. 176), "technology strategy is a firm's approach to the development and use of technology...it must also be broader because of the pervasive impact of technology on the value chain." This view reflects the belief that firms must be competitively positioned in the SC by which they can sustain and improve competitive advantages (Porter & Millar, 1985).

Additionally, the belief that IT positively impacts a firm's performance has been examined and debated (Clemons & Row, 1993). It has been noted that ITs

possess the ability to radically reduce the cost and time expended in processing and communicating information, which has led to changes in the way organisations accomplish tasks (Hammer, 1990).

With superior technological competencies (i.e., the ability to apply scientific and technical knowledge to develop and improve products and processes), firms therefore tend to be more innovative and thus perform at higher levels (McEvily & Eisenhardt, 2004). Ford and Saren (1996, p. 22) explain that different companies operate at various points on a “technology chain”. In such a chain, a technology is likely to be incorporated into a base product with wide application. This product is then incorporated into other products which form subassemblies for those products down the chain.

Because the power of technological changes influences the industry structure and competitive advantage, companies are faced with a wide range of choices of different ways in which to acquire new technologies both internally and externally. The strategic application of the Internet technology in SCM emphasises that technology strategy and management of SC takes place in a highly competitive environment. In the SCM, the most popular use of the Internet is in the areas of managing customer service, purchasing and inventory. Recent research demonstrates that the Internet is utilised in a variety of procurement applications (Lancioni, Smith, & Oliva, 2000) and inventory systems by which customers and suppliers communicate with each other on stock-outs (Deshpande, Cohen, & Donohue, 2003). The benefit of the Internet to firms in managing inventory in their SCs is to keep inventory levels low, reduce overall holding costs, and still provide high levels of customer service.

However, the Internet has not been used to maximum potential in SC integration of demand and supply. Some firms do not fully understand the impact of technological choices on their market positions, internal business processes or external supply relationships. Whilst other organisations have begun to recognise the potential Internet connectivity between participants in the supply network (Harland et al., 2002). Thus, Harland et al (2002) point out

the co-operative relationship changes within supply networks will result from forming strategic alliances, integrating business processes and the application of new technologies among organisations.

3.5 Concluding Remark

This chapter assumes that B2B e-commerce have more significant roles in SCM in the future. The implementation and use of Internet technology for trading information possessing will be of tremendous value, although most Internet technologies and applications currently have not been used to the maximum in SCM. Therefore, it is an important task for organisations to gain experience on how to effectively implement and use of Internet-technology for supporting various forms of business in the global market.

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**PART III THEORETICAL FOUNDATION AND
RESEARCH METHODOLOGY**

Chapter 4

DEVELOPMENT OF A THEORETICAL FOUNDATION

This chapter deals with the body of knowledge related to the management of business relationships. The earlier studies with various approaches on the inter-organisational relationships from different perspectives have been reviewed in section 4.1. It focuses on both the theoretical and empirical studies in the fields of IS and SCM. A multi-perspective discussion about the theoretical foundation is covered in section 4.2. The purpose of this chapter is to present the development of a synthesized framework on e-supply relationships in the network context. Section 4.3 presents the contributions of this new conceptual framework development to the present research by providing a concluding remark.

4.1 Earlier Studies on the Inter-organisational Relationships

From the literature review on SCM provided in chapter 2, it can be seen that many of these studies concern the management issues of organisational relationships. In particular, those organisational relationships taking place in a supply network context where e-technology has strong impacts. Therefore, based on a brief review of earlier studies on the inter-organisational relationships (IORs) in the fields of IS and SCM, partnerships between suppliers and customers are discussed in this chapter.

As reviewed and discussed in chapter 1, since there is the absence of an adequate coherent theoretical basis, Figure 4.1 illustrates the development of a theoretical foundation in this study. Section 4.2 will review and discuss both the theoretical and empirical needs for a new conceptual framework of e-supply relationships development from different perspectives (i.e. relationship

perspective, cultural perspective, technological perspective and structural perspective).

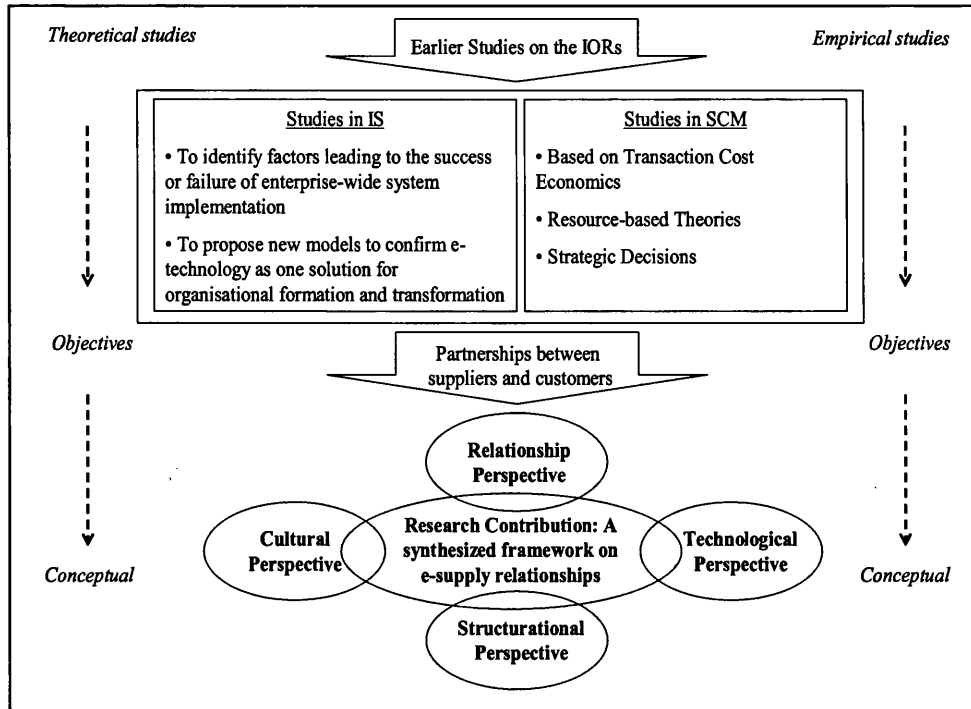


Figure 4.1: Development of a new conceptual framework of e-supply relationships

4.1.1 Studies in the field of IS

There is a wide range of literature on the management of business relationship. Earlier literature reviews have made contributions to the understanding of IORs (Laumann, Galaskiewicz, & Marsden, 1978; Galaskiewicz, 1985; Van de Ven, 1976; Whetten, 1981). A growing body of organisational studies from different perspectives and with various approaches has been contributed to the explanation and analysis of IORs (Oliver, 1990; Grandori & Soda., 1995; Sobrero & Schrader, 1998). Different levels of analyses within organisations (Roberts, 1980; Roberts & Berry, 1985; Porter & Fuller, 1987; Harrigan, 1988) and the industry level (Williamson, 1979; Contractor & Lorange, 1988; Kogut, 1988) have been very thoroughly examined. However, the potential and the influence of the use of e-technologies in a cultural context have not been taken into account in the formation and transformation of business relationships.

Supply networks are increasingly seen as important; emerging technologies such as ERP and e-collaboration are enabling these networks and providing access to a wide range of geographically distanced suppliers (Ford et al., 2002). From the IS perspectives, inter-organisational networks have received considerable attention (Clemons & Row, 1993; Iancovou, Benbasat, & Dexter, 1995; Kumar & van Dissel, 1996). A number of research studies on IORs have been conducted over the past decade. Many of these studies attempt to identify factors leading to the success or failure of enterprise-wide system implementation (Holland & Light, 1999; Dong, 2000b) or to propose new models to confirm e-technology as one solution for organisational formation and transformation (Boudreau & Robey, 1999; Brown & Vessey, 1999; Kelly et al., 1999; Al-Mashari, 2000). Despite the recognition of the importance of the wider organisational and cultural issues associated with the IORs, many of these studies ignore aspects beyond the technological and formal organisational issues, such as business relationships (Oliver, 1990; Ring & Van de Ven, 1992; Grandori & Soda, 1995).

4.1.2 Studies in the field of SCM

In the field of SCM, many of the earlier studies, from an economic view, are based on Transaction Cost Economics (Williamson, 1975) that has been concerned with transactions. This approach emphasises transaction cost efficiency as the motivation for firms' co-operation (see Williamson, 1991). In order to lower transaction costs, resource-based theorists such as (Barney, 1991) provide understandings on the links between a firms' resources as the basis in creating sustained competitive advantages. The resource-based view sees a firm's resources and capabilities as tangible (e.g. financial assets, technology) or intangible assets (e.g. reputation, managerial skills) that are created through the firms' complex interactions (see Dierickx & Cool, 1989). To extend this view, Eisenhardt and Schoonhoven (Eisenhardt & Schoonhove, 1996, p. 319) relate both strategic and social factors. They put in their assumptions, "alliances are formed when firms are in vulnerable strategic positions for which they need additional resources or when firms are in strong

social positions such that they have the resources necessary to know, attract and engage partners.”

Moreover, there are suggestions on strategic decision on managing different types of relationships (Venkatraman, 1991; Cox, 1996; Bensaou, 1999; Harland & Knight, 2001; Cousins & Spekman, 2003), on selecting and working closely with suppliers (Lamming, 1993; Harland, Brenchley, & Walker, 2003c) and different conceptual models are developed and suggested as different ways for the management of business relationships, such as the relationship assessment programmes (RAP) model on customer and supplier relationship management (Lamming et al., 1996) and the dependency and certainty model of inter-firm relationships (Cousins, 2001). However, Cousins (2001) argues that a relationship is not an entity. It should be viewed as an intra- and inter-organisational process that is referred to as a “quasi firm” (Blois, 1972) sitting between the two organisations (see Ford et al., 2002; Lamming, 1993). Therefore, it is essential to develop a conceptual framework focusing on the forming and transforming processes of business relationships.

4.2 A Multi-perspective Theoretical Foundation

Walsham (1993) and Boudreau and Robey (1999) argue the benefits of a multi-perspective to develop a conceptual framework on enterprise systems study. They also illustrate the benefits of a multi-perspective to study IS phenomenon in context. Thus a multi-perspective study focusing on the dynamics of the formation of e-IORs is an appropriate approach.

This study adopts the above views and draws on mixed theoretical perspectives: the relationship perspective, cultural perspective, technological perspective and structurational perspective to study the e-technology enabled supply relationships in the network context. The links between the conceptual perspectives are shown in the Figure 4.2. The following subsections will detail explain each theoretical perspective that is bringing into this research as well as the key elements involved.

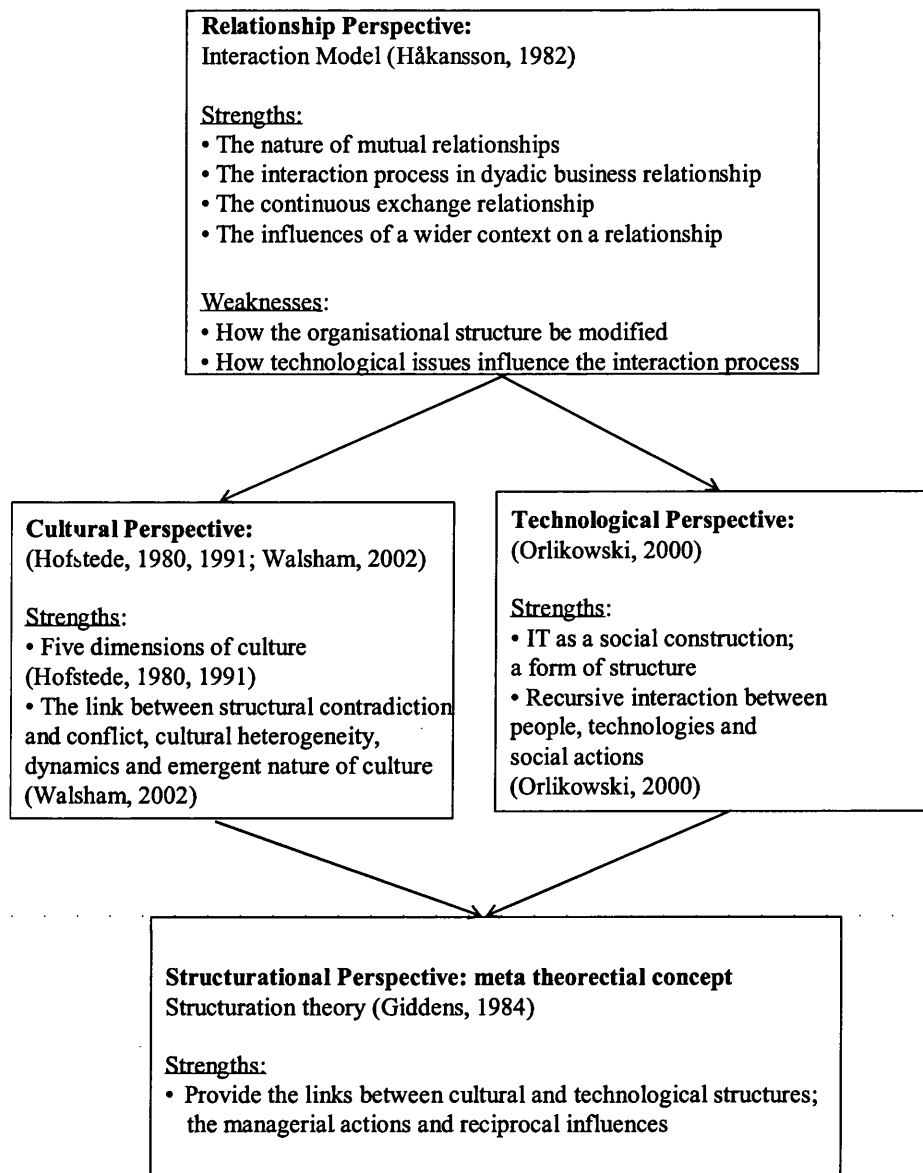


Figure 4.2: Links between four theoretical perspectives

4.2.1 Relationship perspective

Interaction model

From a relationship perspective, the Industrial Marketing and Purchasing (IMP) group offer a useful understanding on the nature of mutually beneficial relationships (e.g. Ford, 1980) by providing the Interaction Model (Håkansson,

1982) (see Figure 4.3). According to Håkansson (1982, p. 8), four basic elements are identified that describe and influence the interactions between buying and selling companies in this model: (1) the interaction process; (2) the participants in the interaction process; (3) the environment within interaction takes place; and (4) the atmosphere affecting and affected by the interaction. The Interaction Model characterised the short-term exchange episodes and long-term aspects of a relationship between buying and selling companies (Håkansson, 1982, p. 23). It sees buyer-seller relationships taking place between two active parties who are likely to be involved in adaptations or institutionalisation to their own process or product technologies to accommodate each other (Ford, 1980). The parties include both the characteristics of the two organisations and the individuals who represent them.

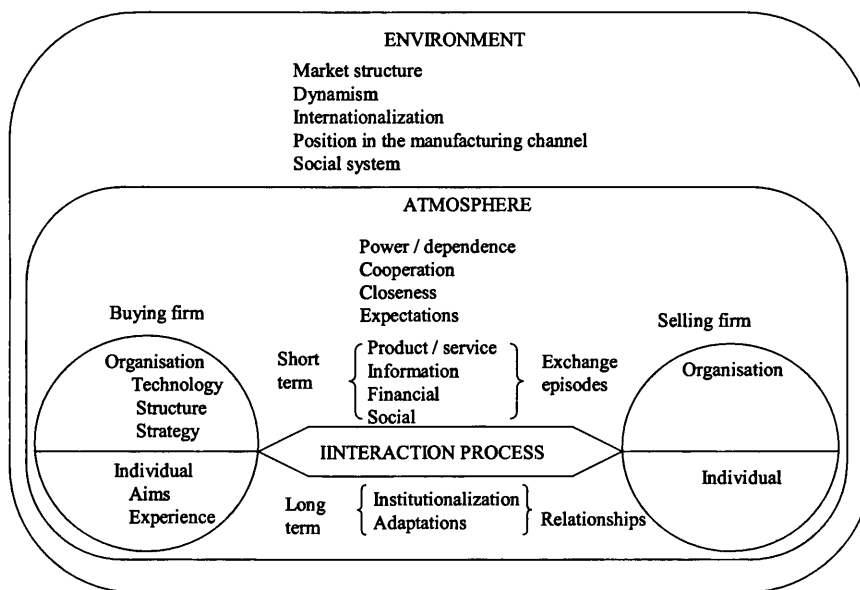


Figure 4.3: Interaction Model (Source: Håkansson, 1982)

This model shows the interaction processes within dyadic relationships and the embeddedness of the industrial networks. It is helpful to provide an understanding of the continuous exchange relationship and the adaptation process occurring within a limited number of identifiable industrial firms (Håkansson & Snehota, 1989). It explains individuals involved in intra-organisational interactions which can radically change inter-organisational interactions. Organisational structures are modified by these interaction

processes. In addition, the wider context including industrial and social environments influences a relationship.

Since the aggregation of the information gathered at the level of the dyadic relationships gives an insight into the chain relationships; and applying the dyadic relationships to the chain relationships provides an insight into chain relationships effects in the network contexts. This approach is also recommended as an application to a several party relationships in a particular industry (Håkansson, 1982, p. 14). However, is there a lack of understanding on how can the organisational structures be modified and how can these wider contexts influence a relationship? From a cultural perspective, cultural influence on the management of business relationship is seen as a vital issue.

4.2.2 Cultural perspective

Recently, there has been an increasing recognition that culture plays a crucial role in the management of business relationship. It is claimed that different national cultures make different demands on organisations and offer them different opportunities (Gabriel, 1999, p. 168). The idea that organisations do business differently as a result of their different cultures gives the reasons why the interactions and business relationships between organisations have different consequences.

Therefore, a better understanding of the role of culture and its influences on the management of business relationships became a vital issue. In order to provide better insights into e-supply relationships in different cultural contexts, this study draws on the cultural perspective to enrich the analysis in the specific cross-cultural networks. This subsection discusses the meanings of culture by focusing on the dynamic and emergent nature of culture.

The concept of culture has been borrowed from anthropology and increasingly used and developed in the studies of organisation (Kluckhohn, 1951; Pettigrew, 1979; Smircich, 1983; Gregory, 1983; Hofstede, 1991; Walsham, 2002). At the

beginning of this century anthropologists defined culture as the way of life of a people, or as knowledge that an individual needed to survive in a society, or that which could be learned by an individual and passed down in a society (Hall & Neitz, 1993, p. 4).

In recent years culture has been defined in many ways by different social scientists. According to Kluckhohn (1951), culture consists in patterned ways of thinking, feeling and reacting, acquired and transmitted mainly by symbols, constituting the distinctive achievements of human groups, including their embodiments in artifacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values. Trice and Beyer (1993, p. 2) define cultures “as collective phenomena that embody peoples’ responses to the uncertainties and chaos which are inevitable in human experience.”

Hofstede (1980, p. 25) gives the following condensed definition of culture as “the collective programming of the mind which distinguishes the members of one human group from another.” Gabriel (1999, p. 171) says that “culture includes all the material and spiritual heritage of an organisation or a community, its myths and stories, artistic and craft artefacts, buildings, tools, laws, institutions, rituals and customs.” In this sense, culture can be equated with the *norms* and *values* of a society (Gabriel, 1999), which further the individuals’ and groups’ programming of their minds in a certain way, and so belong to culture.

Thus, culture presents itself on different levels. Peters (1997, p. 7) identifies the highest level as the culture of a national or regional society. The way in which attitudes are expressed within a specific organisation is described as a corporate or organisational culture; people within certain functions will tend to share a certain professional and ethical orientation. This identification indicates that the understanding of national, corporate and subcultures is particularly important when attempting to manage organisational relationships.

In the cultural studies, Hofstede's view of culture is most cited in the literature. Hofstede (1980, 1991) describes five dimensions of culture by studying a large body of survey data about the values of people who worked in IBM, a large multinational corporation, in over 50 countries around the world as well as the Chinese Value Survey from 23 countries. The five main dimensions are power-distance, uncertainty avoidance, individualism and collectivism, masculinity and femininity, and long- versus short-term orientation on which national cultures differ, were revealed by the statistical analysis.

1. *Power distance* involves human inequality, i.e. the power inequality inside an organisation is usually formalised by the hierarchical boss-subordinate relationships.
2. *Uncertainty avoidance* in organisations takes the form of technology, rules, and ritual. It shows the extent to which organisational members feel threatened by and try to avoid future uncertainty.
3. *Individualism and collectivism* describes the relationship between the individual and the collectivity that prevails in a given society. It is reflected in the way people live together and it has all kinds of value implications.
4. *Masculinity and femininity* shows the duality of the sexes is a fundamental fact with which different societies cope in different ways. The differences between the sexes to which people put different emphasis on work goals and personal goals have implications for their roles in social activities.
5. *Long- versus short-term orientation* appears to be based on Eastern minds of the teachings of Confucius. It opposes long-term to short-term aspects of Confucian thinking: persistence and thrift to personal stability and respect for tradition.

In Hofstede's (1991) definition, he describes how people acquire "mental programs", which create patterns of thinking, feeling and action. The relation between an individual and an organisation evolves as a complex and dynamic

process of socialisation. Through this process, the values and beliefs of individuals are transformed by their involvements with organisations. The organisational culture differences found, resided mainly at the level of practices as perceived by members.

This view of culture, although popular in the management literature, has been criticised as being rather crude and simplistic by IS researchers such as Walsham (2002). Walsham argues that Hofstede-type of studies offer a static view of culture and do not provide analytical devices for studying cross-cultural contradictions nor do they provide any description of cultural heterogeneity and its impacts on IS. In other words, culture is viewed as dynamic and emergent. The existing culture in a context is a mixture of the various cultures and/or as a result of different cultural conflicts. Like social structure, culture constitutes continued reproductive interactions between human actions and social structures. Culture and human actions mutually influence each other. In fact, culture is a structural property.

From an organisational perspective, Riley (1983) suggests that organisational culture should be viewed as a system of integrated subcultures, not as a unified set of values to which all organisational members ascribe. Gregory (1983) argues that many organisations have emphasised the homogeneity of culture and its cohesive function rather than its divisive potential. Instead, most organisations should be viewed as multicultural. Also, Gregory proposes to use “native-view” paradigms to study the cultures of organisation members, which may be more accurate to relate the degree of integration of cultures as “strong” or “weak”. However, the “native-view” approaches are problematic, because two or more native viewpoints are probably different from each other.

Therefore, Walsham (2002) focuses on the link between structural contradiction and conflict, cultural heterogeneity, and the dynamic and emergent nature of culture. His work presents the structurational analysis for providing a deeper examination of cross-cultural working and IS than is found in the current

literature. This theoretical approach offers a new way of cultural studies in the field of IS.

In order to provide better insights into e-supply relationships in different cultural contexts, this study draws on the cultural perspective to enrich the analysis in the specific context. Since this study is seeking to gain a better understanding on Chinese cultural context in which e-supply relationship were taking place, a detail discussion on Chinese cultural values and their implications in state-owned-enterprises (SOEs) will be provided in chapter 6.

4.2.3 Technological perspective

From a technological perspective, there is no explanation on how technological issues influence the interaction process in the Interaction Model (Håkansson, 1982). However, technology context is another important perspective in studying e-technology enabled organisational relationships. The use of the Internet technology in SCM is a relatively recent phenomenon. There have been few studies done on the use of the Internet in the management of supply relationships. The principal literature support comes from the description of projects of companies on how they have utilized the Internet in the management of their individual SC. These studies review emphasises that it is very important to draw on the technological perspective in this research to study the technological context in which the e-supply relationships take place.

More recently, there is a growing body of work on organisational studies that has received considerable attention from IS researchers. They consider IT as a social construction, designed and used by humans (e.g Walsham, 1993). IT is viewed as a form of structure offering interactions between people, technologies, and social action (Walsham & Han, 1991; Orlikowski, 1992a; Walsham, 1993; DeSanctis & Poole, 1994; Orlikowski, 2000). Orlikowski (2000) views technological structure as an emergent structure because she sees that the structure of technology in use is constituted recursively as humans

regularly interact with certain properties of a technology. She uses examples to help explain the set of rules and resources that serve to shape their interactions.

4.2.4 Structural perspective

Structuration theory

This view regards social structure as rules and resources recursively implicated in social reproduction. This idea can be found in Giddens's Structuration Theory (Giddens, 1976, 1982, 1984). Structuration theory offers a notion that the social structure is being drawn on by human actions and interactions, while the actions of humans in social contexts produce and reproduce the social structure (Jones & Nandhakumar, 1993). Therefore, this study draws on the theory of Structuration to gain a better understanding on the interactions between human actions and social structures (i.e. cultural and technological properties), to analyse the detailed work patterns in different cultural contexts and to examine the dynamic and emergent nature of culture.

Structuration theory (Giddens, 1976, 1982, 1984) can be viewed as a process-oriented theory that treats structures as both a product of and a constraint on human actions. Giddens (1991a, p. 201) affirms that structuration theory is the label he attaches to his "concern to develop an ontological framework for the study of human social activities". Ontology here refers to "a conceptual investigation of the nature of human action, social institutions and the interrelations between the action and institutions." Giddens (1984, pp. 17 - 25) defines a structure as "rules and resources, recursively implicated in the reproduction of social systems"... "social systems" are "reproduced social practices" or "reproduced relations between actors or collectivises organised as regular social practices".

To study structuration, Giddens (1976, p. 120) states that "is to attempt to determine the conditions which govern the continuity and dissolution of structures or types of structure." Giddens' concept of "duality of structure"

underlines the transformation process of human knowledge that is influencing social structures. He stresses that “to enquire into the structuration of social practices is to seek to explain how it comes about that structures are constituted through action, and reciprocally how action is constituted structurally” (Giddens, 1976, p. 161). Social structures are not just objects outside the human actors with which they may interfere. As Giddens (1982) emphasises, “man actively shapes the world he lives in at the same time as it shapes him.” For example, organisational members often help to form cultural norms as these norms in turn influence their day-to-day interactions within the organisation. This leads to the view that humans and the social phenomena are mutually interacting.

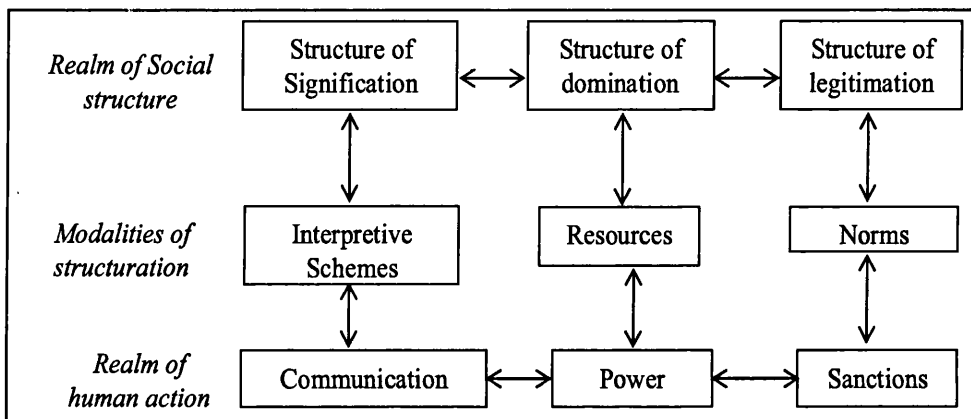


Figure 4.4: Giddens' model of structuration (Based on Giddens, 1976)

According to Giddens three dimensions of structure have been identified, which are signification, domination and legitimating as shown in Figure 4.4. These are interacting through *modalities of structuration*: interpretive schemes, resource and norms, with human action of communication, power and sanctions. Features of “structure of signification” are rules governing communications; “interpretive schemes” concerns the meanings of communications respectively. Features of “structure of domination” result from the fact that human actions inevitably involve “power” over “resources”. Features of “structure of legitimation” refer to the “sanctions” of conduct, which are “norms” (normative characters) of actions. The *realm of social* represents an existing structure of rules derived from a cumulative history of action and interaction. In contrast, the *realm of human actions* refers to actual arrangements of humans.

The theory of structuration is also regarded as a useful analytic tool for studying organisational interactions. The “structurational analysis” (Giddens, 1976, 1984) involves examining human actions with structural explanations in social systems that are defined as “structured totalities” (Giddens, 1979, p. 65). “Structuration” can be restated in terms of: “the structure of social relations across time and space in virtue of the duality of structure” (Giddens, 1984, p. 376).

According to Structuration Theory, “an understanding of social systems as situated in time-space can be effected by regarding structures as non-temporal and non-spatial, as a virtual order of differences produced and reproduced in social interactions as its medium and outcome” (Giddens, 1979, p. 3). Giddens (1979, p. 64) employs “structure” refers to “structural properties”, or to “structuring property”, structuring properties providing the “binding” of time and space in social systems. He argues that these properties can be understood as rules and resources, recursively implicated in the reproduction of social systems. The rules and resources people use in interaction are analysed as dualities: they are both the medium and the outcome of interaction. Because structures provide the rules and resources individuals must draw on to interact, rules and resources exist only through being applied and acknowledged in interaction (Giddens, 1979). Then, structuration is the production and reproduction of social systems through the application of rules and resources. As Giddens (1979) notes:

A social system is thus a ‘structured totality’. Structures do not exist in time–space, except in the moments of the constitution of social systems. But we can analyse how ‘deeply-layered’ structures are in terms of the historical duration of the practices they recursively organise, and the spatial ‘breadth’ of those practices: how widespread they are across a range of interactions (p. 65).

Thus, structuration means that “the knowledgeability of social actors is always bounded by the unintended consequences of action” (Giddens, 1979, p. 172), through which social systems are structured by the application of rules and resources in and through actors’ continual daily life reproduction. Jones and Nandhakumar (1993) argue that Giddens’ theory of Structuration draws attention to the unintended consequences of intentional actions. Structuration offers a useful conceptual scheme to understand how actors produce their social structures and at the same time the institutional constraints created by them.

Therefore, to understand the links between cultural and technological structures, and the links between managerial actions and reciprocal influences, structuration theory is used as a meta theoretical concept to link the four different perspectives discussed above in this study.

In the course of his account of Structuration Theory as a world-view, Kilminster (1991, p. 76) explains that “Structuration Theory is, on the one hand, a meta theory of action, and on the other, a pulling together of a selection of concepts, tenets, assumptions, emphases and normative elements, the unity of which constitutes a world-view.” With regard to the objectives of this study, which are: 1) to investigate the dynamics of the formation and transformation of the e-supply relationships over time; 2) to gain a better understanding of the cross-cultural network actors in establishing and maintaining customer and supplier relationships, enabled by the use of newer type of e-technologies, this study draws on Giddens’ Structuration theory (1976, 1982, 1984) as a meta theoretical framework (see Figure 4.2) to integrate the theoretical constructs developed in this research. It focuses on organisational members’ ongoing actions and interactions in the cross-cultural and e-technological contexts (Orlikowski, 2000).

Based on the Interaction Model (Håkansson, 1982), Figure 4.2 presents the links between the cultural and the technological perspectives by adopting structuration theory as a meta theory. As reviewed above, structuration theory (Giddens, 1984) helps to explain the interactions between human actions and

structures, enactment of structures as well as the dynamism of the embedded cultural and technological structures. It also illustrates a study from a cultural perspective and a technological perspective and will deal with the questions that are not well explained in the Interaction Model (Håkansson, 1982). The development of this multi-perspective theoretical foundation in this study will contribute to a synthesized framework on e-supply relationships in the network context that will be presented in chapter 11.

4.3 Concluding Remark

Based on the literature review of previous studies in the IS and SCM fields, this chapter provides the development of a multi-perspective theoretical foundation, with which this case study examines key themes and the concepts (i.e. embeddedness of business relationships in industrial networks, embedded corporate cultural structure and embedded technological structure) from different aspects and stands different views of point. The benefits of a multi-perspective theoretical foundation are achieved by the development of a synthesized framework on e-supply relationships in the network context, which will be presented in chapter 11.

This newly developed conceptual framework that will be presented in Figure 11.1 will illustrate the dynamics of the emergence and transformation of e-supply relationships in its social, cultural and technological contexts. It will contribute to IS, SCM, relationship marketing and organisational studies. In addition, this proposed work will contribute to the development of a comprehensive framework of e-technology enabled IORs in the network context. It will confirm the existing theories and add further explanation and effectiveness management to business relationships.

Thereby it will enrich the knowledge of e-supply network management. Better understanding can, in turn, inform practice, in that the organisations can better manage e-supply relationships in their network contexts. Furthermore, the findings from this study will contribute to the understanding of the wider

organisational change process by providing insights into supply relationships and organisational transformation. Chapter 12 will discuss further the implications for the use of e-technology in the dynamics of business relationships transformation in theory and management.

Chapter 5

RESEARCH METHODOLOGY

Research methodology is the procedure carried out by a researcher to explore that research phenomenon (Guba & Lincoln, 1994; Parkhe, 1993), which can be defined as a three-step process in terms of ontology, epistemology and methodology. Ontology is the essential assumptions that are made regarding the basic elements of reality (Parkhe, 1993), that is, the configuration and character of reality (Guba & Lincoln, 1994). Epistemology examines the character and basis of knowledge or the characteristics of the relationship between reality and the research (Parkhe, 1993). These three choices draw the boundaries of the research paradigm and define what the activity of research is, how to proceed, how to measure progress, and what constitutes success.

This chapter begins with the philosophical assumptions that support the theoretical paradigms that shall inform the investigation. The discussion in section 5.1 underlies an interpretive approach that is better suited to present the dynamics and complexity of the formation and transformation of e-supply relationships and to gain a better understanding of e-IORs between organisations. In view of this philosophical perspective, and to answer the main research questions, an in-depth case study is adopted in order to carry out an investigation of the e-IORs within the supply network context. The choice of research methods is discussed in section 5.2. A research design is presented in section 5.3. Section 5.4 concerns data collection methods. Procedures of data analysis are covered in section 5.5. Section 5.6 provides a concluding remark on the research methodology that is adopted in this study.

5.1 Interpretive Research Approach

The philosophical assumptions of interpretive research are based on the belief that the social realities are constructed and reconstructed by human beings

through their actions and interactions with the worlds around them. The interpretive approach therefore is associated with phenomenology (e.g. Schutz, 1973), ethnography (e.g. Geertz, 1973) and hermeneutics (e.g. Bleichier, 1980) philosophical bases. Interpretivism adopts the position that people create and attach their own meanings to their behaviour by motivating the world that has a specific meaning and relevance structure for their behaviour (Schutz, 1973, p. 59). As Polanyi (1969, p. 181) proposes that “both the way we endow our own utterances with meaning and our attribution of meaning to the utterances of others are acts of tacit knowing. They represent *sense-giving* and *sense-reading* within the structure of tacit knowing.” In brief, interpretive study focuses on the complexity of human sense making as the situation emerges (Kaplan & Maxwell, 1994). It aims to understand the subjective views and the roles of human actors in their social worlds and understand the meanings of the deeper structure of social phenomena.

This perspective challenges the key idea of the dominant positivist research tradition that the social world can be understood as an objective physical world that exists independent of humans (Orlikowski & Baroudi, 1991). For example, organisational relationship is understood as a given structure that should be measured through objective methods rather than being subjective through people’s own words, drawing on their meanings and experiences. However, ontologically, I take the position that organisational relationships are not given or exist independently, but developed by organisational members within various social settings. It is an inappropriate task to try to measure them objectively with precision. The constantly changing process of the development of the relationships and the wider context in which the relationships take place, are primarily as social constructions that differ from place to place. Different people understand the world around them differently. Therefore, my epistemological belief is that to examine the processes and to understand the meanings of the wider context of establishing business relationships can only be interpreted. As the interpretive researchers Nandhakumar and Jones (1997) point out that understanding social phenomena always involves interpretation.

5.2 Qualitative Research Methods

Interpretive researchers emphasise ‘get close of those generating it’ (Rosen, 1991, p. 6). Understanding is seen as the view of an ‘insider’ to the world being studied. Rich descriptions of the wider context are provided by the data that are “really our own constructions of other people’s constructions of what they and their compatriots are up to” (Geertz, 1973, p. 9). Geertz argues that interpretive researchers should seek to develop rich understandings of the research context from which a ‘thick description’ of its characteristics and complexities may be achieved.

With the intention of understanding the dynamic and complexity of e-IORs within their social settings, this study follows the suggestion that the most appropriate method for conducting empirical research in the interpretive tradition is the in-depth case study (Walsham, 1993). It is claimed that case study research is the most well-suited method used in information systems (Orlikowski, 1991; Alavi & Carlson, 1992) as case studies examine humans within their social settings. Interpretive studies in IS are “aimed at producing an understanding of the *context* of the IS, and the *process* whereby the IS influences and is influenced by the context” (Walsham, 1993, pp. 4-5). Since the objectives of this study have shifted to organisational rather than technical issues, it employs an in-depth case study approach to explore the research phenomena.

From an interpretive standpoint, although the textual analysis (e.g. Beath & Orlikowski, 1994) involve interpretation, they provide very ‘thin’ descriptions and only snapshots of the actors’ interpretations (Nandhakumar & Jones, 1997) and are limited in providing rich descriptions of research phenomena. Thus, this study involves qualitative research methods. By doing so, it focuses on organisational members’ ongoing actions and interactions in establishing relationships and concerns the meanings of use of e-technologies to the organisational members within their particular social, cultural, industrial and organisational contexts.

It is important to note that interpretive studies allow researchers to gain sufficient access to knowledge and meaning of actors; and to develop plausible and credible representation of their interpretations (Altheide & Johnson, 1994; Walsham, 1993). Although qualitative methods are recognised as the methods most typically used (Guba & Lincoln, 1981; Patton, 1990), they are not limited to interpretive studies. Qualitative techniques as “an array of interpretative techniques which seek to describe, decode, translate and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world” (Van Maanen, 1983, p 9).

5.3 An In-depth Case Study

In order to generate valid interpretive knowledge, an in-depth case study observes the dynamic process is suggested to be carried out over a reasonably long period (Walsham, 1993). It is particularly appropriate to examine the changing process of the development of the business relationships within their contexts. Moreover, the qualitative research methods allow actors’ sense-making, interpretations and meanings to arise out of human actions and new themes to emerge from the situation (Orlikowski & Baroudi, 1991). This research design is done in a way that incorporates the views of the ‘actors’ in the case under study to capture rich and detailed data. Furthermore, the use of in-depth case study is justified as the approach to study the international competitiveness, which is reported here as a unique case that can represent a significant contribution to knowledge and theory-building (see Yin, 1994, pp. 38 – 40).

5.3.1 Research site

China’s telecom industry in the global competitive environment

Since a supply push created by emerging ITs entering the marketplace, the introduction of local services competition and the explosion of newer types of

ITs has led to heightened interest from investors. China's telecom has become a highly dynamic industry during the two decades of reform and structural changes. As a result, the telecom industry has shown an economic growth rate in the mid-to-late 1990s that few other industries could match.

The current situation about the fast-changing China telecom market offers exciting business opportunities including China's telecom and the WTO, China's 10th 'Five-Year Plans' (2001-2005), China's electronic IT industry, and the Internet and e-commerce in China. Despite this significant progress there are a number of difficulties that China's emerging large firms encountered. Such as China's telecom firms have the difficulty of a much less transparent and more bureaucratic background of the particular domestic environment in which they operated than their international, majority state-owned competitors (Nolan, 2001, p 179). The related policies and control standards must be further systematized in order to meet international requirements.

In 2001 China's WTO accession changed the scenario; the managing systems of telecom are still being perfected. WTO membership provides great opportunities for foreign operators to take part in the operation of basic and value-added telecom services in China. At the same time, China's domestic telecom supervising and managing systems are confronted by more challenges along with opening to the outside world gradually.

Even more importantly, the global business environment dramatically shapes the nature of Chinese enterprises' corporate culture. The way of establishing supply relationships with Chinese firms both domestically and internationally are radically different from previous ones (Pang, Roberts, & Sutton, 1998). The roots residing in traditional Chinese values, particularly Confucian (Leung, 2004; Alon & Lu, 2004), influence the way of doing business in China as well as pose even greater challenges for China's aspiring global engagement. The young Chinese companies like TelcoX stand very much at the confluence of Western and traditional Chinese culture values. Their size, mode of operation,

international exposure, and adoption of modern Western practices impel them away from their traditional cultural values. It is a newer organisational form that is becoming more prevalent across China as the forces of globalisation gather momentum.

Organisational context: TelcoX

TelcoX is one of the largest telecom carriers in China that provided a full spectrum of services and solutions to meet the broadband telecom needs of both businesses and individuals. In mid 1999, TelcoX was founded by four bodies that are affiliated with the Chinese government. With regional offices in main cities such as Beijing, Hong Kong, Shanghai, and Shenzhen, TelcoX was poised to benefit from the rapid growth of China's telecom and Internet sectors.

TelcoX merged with another large Chinese state owned telecom company (Company A) in 2002. A subsidiary of TelcoX providing comprehensive services to international carriers and enterprises outside of China was established in late 2003. As one of the major subsidiaries of TelcoX, this entity executed TelcoX's national strategy of 'global expansion' and formed joint ventures and partnerships with foreign companies. Its responsibilities mainly lay in the operation and management of the international network asset of TelcoX and the operation of all domestic and overseas international services targeted at international operators and corporate customers. It was the first and sole domestic telecom enterprise that was dedicated to the development of all international businesses, which was also a key step in institutional reforms in China's telecom industry.

Currently, business relationships with dozens of first-class operators through the world have been established in TelcoX. People educated in Western countries such as America, with experience working in multinational companies, formed the senior management team.

5.3.2 Pilot study

To carry out this research, a pilot study commenced during the summer of 2002 within TelcoX in Beijing, China where the social, cultural and industrial contexts have already been understood well. It was a part of the large-scale research.

Twelve semi-structured interviews of sixty to ninety minutes in length were conducted using a twenty-five-question interview guide (see Appendix 1), which was developed based upon a review of the literature at the early stage of this research. Interviewees spanned vertical levels and functional departments (see Table 5.1) and included a manager from one of TelcoX's first tier suppliers.

This pilot study helped to redefine the research questions and key themes in this main research that was conducted in 2003 and 2004. Section 5.4 will discuss the data collection in detail.

Positions of Interviewees	Number of Interviews
Director of CSD	2
Senior Manager of CSD	2
Training & Technical Support, CSD	1
Quality Control Supervisor, CSD	1
Director of IT Consultant	1
Director of Management of Information Systems	1
Director of Audit Department	1
Director of Project Procurement Department	1
Manager of Project Procurement Department	1
Account Manager, Network Systems (1st tier supplier of TelcoX)	1
Total	12

Table 5.1: Number of interviews and the positions of the interviewees within TelcoX

5.3.3 Levels of study

Since this study aims to provide better insights into e-IORs in the wider network context, it involves the studies of the telecom industry and a focal firm – TelcoX, participating in that industry. Supply activities within the focal firm, in dyadic relationships between suppliers and customers, in chains of firms (supplier - focal firm - customer) and in inter-organisational networks (a set of chains of firms) have been expressed as different levels of supply (Harland, 1996).

Four levels of study are involved in this research. Common to all these levels is the flow of supply and activities associated with that flow. Figure 5.1 presents an overview for levels of study on organisational relationships.

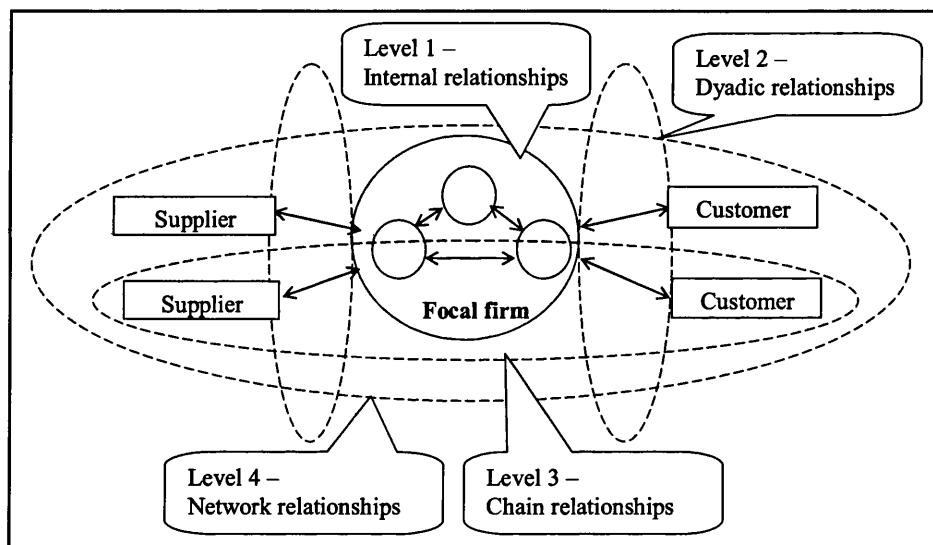


Figure 5.1: Levels of study on organisational relationships

In order to enrich the existing approach of studying business relationships, an Interaction Model (Håkansson, 1982) is adopted to study the internal relationships within the focal firm, the interaction processes in dyadic relationships and the embeddedness of the wider network that is formed by selected key firms. Understanding of the activities associated with that flow of supply is an important explanatory factor for the necessities of e-IORs

formation and transformation. The aggregation of the information gathered at the level of the dyadic relationships gives insight into the chain relationships; and applying the dyadic relationships to the chain relationships provides insight into chain relationships effects in the network contexts. Structuring and restructuring of a network at any given moment are defined by the results of the network activities in the social, cultural, industrial and technological contexts. The interactions between activities and structures are identified as produced and reproduced processes of structuration.

Therefore, one of the objectives of this level of study is to understand and examine business relationships within each firm or level and between these levels. Secondly, it allows the comparison between the business relationships at different stages, i.e. before and after e-technology has been implemented. Thirdly, it applies the dyadic relationships to the other levels and provides insight into the chain and network relationships effects on cultural issues. Finally, employing these four different levels of the data collection and analysis is also important to prevent to losing sight of the original research purpose and question, from a large amount data collected through multiple sources.

5.4 Data Collection

Semi-structured interviews

These different levels of study increase the complexity and amount of data to be gathered. It is widely recognised that interviews (e.g Easterby-Smith, Thorpe, & Lowe, 2002; Nandhakumar & Jones, 1997) are an important qualitative research method for exploring specific topics and investigating how people understand the worlds in which they live and work (Rubin & Rubin, 1995). The face-to-face contact with participants allows the researcher to pick up on non-verbal communication, if not always to record the verbal communications (Nandhakumar & Jones, 1997). It also encourages practising participants to tell their experience and understanding, rather than impose a

premature diagnostic structure on the research data (Glaser & Strauss, 1967; Strauss & Corbin, 1990; Yin, 1994).

Interviewing involves a set of assumptions and understanding about the situation, which is not normally associated with a casual conversation (Denscombe, 1998; Silverman, 1985). Three types of research interviews are defined as a structured interview, a semi-structured interview and an unstructured interview (Denscombe, 1998). These three types of interviews involve different control over the format of the questions and give different flexibility to the interviewees. The degree of engagement between interviewer and interviewees will vary depending on the degree of structuring of the interview. Easterby-Smith et al. (2002, p. 87) suggest that both semi-structured and unstructured interviews are appropriate methods when “it is necessary to understand the constructs that the interviewee uses as a basis for her opinions and beliefs about a particular matter or situation.”

Also, Nandhakumar and Jones (1997) argue that the lower the degree of structuring of the interview, the more chance the researcher may have to explore the respondents' answers and to assess their trustworthiness and non-standard use of terms. In an interview design, open questions in the initial stage are suggested (Easterby-Smith et al., 2002; Rubin & Rubin, 1995), so that the interview study design takes shape gradually. However, since in-depth interviews are derived from an interpretive perspective, it follows that there is no one 'objective' view to be discovered which the process of interviewing may bias. Rubin and Rubin (1995, p. 22) say that “interviewing does not require researchers to drop their own cultural values and assume those of their interviewees, but it does require them to be self-aware.” So, an interviewer needs to be reflective during interviews.

Thus, the main research focuses on semi-structured interviews of the key players of TelcoX and selected firms of supply network members who were the main suppliers and customers of TelcoX. Over thirty-nine interviews of sixty to ninety minutes in length, in seven organisations have been conducted with

managers representing various processes including customer service management, information system management, fulfilment and procurement management. It commenced in the year of 2003 and 2004. Most of the interviews were tape-recorded, transcribed and then translated into English for analysis. In a few cases interviewees indicated discomfort with being recorded, and so notes were taken during these interviews. Interviewees spanned vertical levels involving the focal firm – TelcoX, its first tier and second tier suppliers as well as its first tier customers both in China and the UK (see Table 5.2).

Main Semi-structured Interviews			
Firms	TelcoX	Suppliers	Customers
Positions of Interviewees & Number of Interviews	Directors (10) Senior Managers (9) Managers (6) GMs, Regional Office, CSSD (3) Senior Manager, Regional Office, CSD (1)	Directors (2) Senior Managers (3)	Directors in China (2) Director in UK (1) Senior managers in UK (2)
Total number of Interviews	29	5	5

Table 5.2: Details of data collections

They were the main actors and key members involved in the CSS and other IS implementation or related business operation processes. The functions represented by those interviewed included customer service, service operation, network management, accounting, product development and project procurement.

The interviews were focusing on understanding:

- (1) Organisational members' meaningful experiences with the internal and/or external working relationships (organisational relationships), e.g. how the company operates and whom they work with in terms of external partners?
- (2) E-technology implementation process, e.g. how the technology was implemented?

- (3) The difference (changes) within the organisation between the new technologies adopted before and afterwards; and
- (4) The influence of each change on other members internally and/or externally, e.g. inter-department co-ordination or business partners co-operation.

Direct observation

To understand the influence of national and corporate cultures on the development of e-IORs among the organisations being studied and to get beneath stated objectives, direct observations were also carried out in this study. I began my first observation in TelcoX in the summer of 2002 and then conducted it in TelcoX as well as in the sites of selected suppliers and customers in 2003 and 2004. During this period, I mainly regularly visited TelcoX twice a week. These visits varied in duration; sometimes these lasted the entire day and at the other times there were only between 2 to 4 hours.

The daily work and activities in the office that were observed before, during and/or after each interview, helped me to discover the actual interactions between managers and staff and the impact of use of the e-technologies on employees' actual behaviour. I was observing employees' interactions and tried to "enter the world of organisational members" during their work as well as during breaks. I spent hours to observe employees' communications via telephone, email systems, CSS as well as other IS. I was also trying to make conversations and informal talks when observing employees who were talking to each other. Sometimes, I joined employees' coffee and lunch breaks. Occasionally, I went to TelcoX's office during weekends when employees needed to do some overtime work.

In this way, the continuous data could be collected, which provided me with insights into the dynamics of the embedded cultural and technological organisation structure in which to study the process of the transformation of e-IORs. Therefore, this study employs qualitative data collection methods mainly

through semi-structured interviews and direct observations within the e-technologies enabled Chinese telecom enterprise - TelcoX. Other qualitative data gathering methods used in this study, such as field notes and related documents, were very useful to verify the collected data and gain more detailed information to understand the e-technology enabled Chinese telecom organisation (cf Nandhakumar & Jones, 1997). Field notes include interview notes and summaries were written for periodical review and reflections on this study. Internal operation documents and presentations were filed and examined; email communications with organisation members were recorded for following in-depth interviews and studies. Marketing promotion materials such as brochures and posters were collected; and other related materials such as web news were saved.

Types of Data					
Firms	Regular visits	Conversations with employees	Field notes	Documents	Other materials
TelcoX	Twice a week	<ul style="list-style-type: none"> • During breaks • Join the coffee and lunch breaks • During weekends 	<ul style="list-style-type: none"> • Interview notes • Observation notes • Conversation summary 	<ul style="list-style-type: none"> • Emails • Internal training materials • Internal operation documents 	<ul style="list-style-type: none"> • Posters • Brochures • News from Websites
Suppliers	Once a week	<ul style="list-style-type: none"> • During breaks • Join the coffee breaks 	<ul style="list-style-type: none"> • Interview notes • Observation notes • Conversation summary 	<ul style="list-style-type: none"> • Emails 	<ul style="list-style-type: none"> • Brochures • News from Websites
Customers	Once a week	<ul style="list-style-type: none"> • During breaks • Join the coffee breaks 	<ul style="list-style-type: none"> • Interview notes • Observation notes • Conversation summary 	<ul style="list-style-type: none"> • Emails 	<ul style="list-style-type: none"> • Brochures • News from Websites

Table 5.3: Types of Data

5.5 Procedures of Data Analysis

As a native Chinese researcher intertwined with this research, my social background was a critical resource making the sense-reading easier during the

data analysis. The analysis of the data involved a critical examination of large amounts of qualitative data through reading and re-reading of the interview transcripts, field notes and documents while simultaneously allowing the concepts to emerge from the empirical data.

The collected qualitative data was organised in a similar format, i.e. all the interview transcripts on A4 size papers were bound properly; field notes were kept in a notebook; documents and other related materials were filed in the folders with different labels. Soft copies of the possible data were saved in the database as the back-up copies of the original data. The systematic organisation of the data made me able to return to the particular points easily, so that I avoided being overwhelmed by a large amount of data.

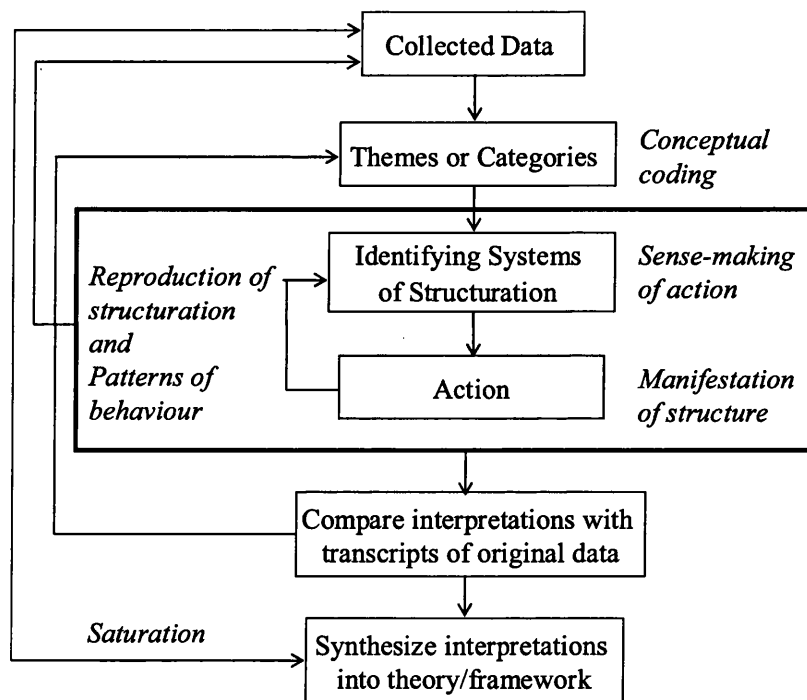


Figure 5.2: Procedures of data analysis
(Source: adapted Strauss & Corbin, 1990, 1994)

During the early stages of this research, the process of data collection, coding and analysis were preceded iteratively and were more open-ended. Later, it was directed by the emerging themes and concepts. This iteration between data and concepts came to an end when enough themes and associated concepts were

identified. The themes and concepts were identified following procedures as seen in Figure 5.2 to help to explain the transformation process of e-IORs over time. These procedures are similar to Grounded Theory (Strauss & Corbin, 1990, 1994) in process; therefore, I have adopted the techniques of Grounded Theory in the data analysis in this study.

Conceptual coding

The analysis of the data began from the initial stage of conceptual coding. The line-by-line coding helped me to discover participants' own views, from which the emerging themes or concepts were identified, such as working relations, decision-making, communication, etc. Based on these emerging themes, I developed categories as personal relationships, leadership behaviour, communication channels and so on. As the analysis progressed, new concepts emerged as relevant. The new categories were given to the same extract of data with new insights that came to me (e.g., communication channels → communication patterns).

Production of theoretical concepts

As various themes and concepts emerged from the early consideration of the data, I selected reappearing codes and took into account a careful study of the initial conceptual codes. With the detailed analysis, I went back to the field and checked the validity of the selected codes (e.g., leadership behaviour) by focused interviews and more detailed observations. Based on the theoretical foundation and according to structuration theory (Giddens, 1976, 1982, 1984), identifying the systems of structuration (e.g., communication patterns) helps to *make sense of actors' actions* (e.g., intra- and inter- organisational communication) that are manifestation of structure. *Reproduction of structuration and patterns of behaviours* (e.g., emerging communication patterns) confirmed the identified systems of structuration (e.g., existing communication patterns). By checking this, the empirical data was confirmed that it fits the emerging synthesized framework, which is discussed earlier in

chapter 4 and will be presented in chapter 11. When revisiting the collected data and through the process of 'compare interpretations with transcripts of original data', I refined a set of understandings that explain the themes and relationships identified in the data.

Theoretical saturation

The data analysis was ended when the new data and additional analysis could not discover any new category. The themes and concepts identified in these procedures of data analysis represent sense-giving and sense-reading of the transformation process of e-supply relationships within this network context. A synthesized framework is developed with the findings from this fieldwork as shown in Figure 11.1.

5.6 Concluding Remark

As discussed above, this study employs an interpretive in-depth case study approach through semi-structured interviews and direct observations. It aims to understand the subjective views and the roles of individuals and organisations in their business relationships and understand the meanings of the deeper structure of the social phenomena in which e-supply relationships were taking place.

This chapter presents the research methodology adopted in this study that allows sufficient access to knowledge and meaning of case study sites to be gained. The employed research approach as well as methods could develop plausible and credible representation of their interpretations. Studies at four levels help a synthesized framework to be developed in this study. The case study and findings will be covered by Part IV and Part V in this thesis. Within these two parts, chapter 6 will provide a wider context of the e-supply relationships taking place. Chapter 7 will describe the details of case study. Findings will be presented in chapter 8 to chapter 11.

PART IV CASE STUDY

Chapter 6

THE WIDER CONTEXT OF THE E-SUPPLY RELATIONSHIPS

This chapter discusses the wider contexts of the e-supply relationships that were taking place, particularly in China. It is divided into eight sections. The first section 6.1 provides the Chinese cultural values and their implications in SOEs. It specially focuses on the understanding of the influences of ancient Chinese military stratagems '*the 36 ji*' and the role of *guanxi* in Chinese social and business activities. A vital role of the ICT industry that is played in the development of national economies and the progress of societies is discussed in section 6.2. To examine the effects of both internal and external factors influencing e-relationships development, section 6.3 provides an understanding on the interaction environment. Section 6.4 examines the current situation of SCM in China. It considers the research areas of China's telecom industry, electronic IT industry and the Internet industry. Section 6.5 provides the background of China's telecom industry, including the major industrial reforms and restructuring, development of the telecom services and the WTO impacts on China's telecom industry. Section 6.6 reviews the electronic IT industry in China. The Internet development in China is covered in section 6.7. It addresses the issues that the opportunities and challenges of the Internet China confronts, as well as presents the benefits from the e-commerce. Finally, section 6.8 concludes with suggestions on how emerging economies such as China gain the benefits from e-commerce-driven globalisation.

6.1 Chinese Cultural Values and Their Implications in SOEs

A significant aspect of China is its long national cultural history in which people are deeply involved with others. In the Chinese culture much emphasis has been placed on the teachings of Confucius (Leung, 2004; Alon & Lu., 2004). It stresses the importance of both the followers and the leaders. Chinese

management philosophy centres on people (Bond & Hwang, 1986; Bond, 1991). Since Confucius codified the societal rules, values, and hierarchical structures during the sixth century B.C., Chinese culture has stressed the importance of social order in terms of harmony, hierarchy, and development of moral potential and kinship. The codified ties of individual, family, and society define a person's proper place and position in any given hierarchy and the responsibilities these imply. Members do not exist independently, but in a network of relationships and normally conduct work activities together, although individual work tasks are differentiated (Pang et al., 1998). The emphasis on collectivism and harmony projects a preference for co-operation, group decision-making and relationships. In Hofstede's (1991) empirical work the Chinese economies ranked highly on "power distance" that reflects the willingness of subordinates to depend on the decisions and instructions of their superiors. These ideas and principles may claim to be central in Chinese management culture.

More importantly, in the Chinese context, one specific Chinese premise from the ancient statecraft of the Warring States era seems to influence Chinese people on handling their business. Unfortunately, lessons from Chinese statecraft about dealing with business partners are little known in the West. The analysis of the case study illustrates these lessons that were implicit in every interaction process of their business activities and were embedded in the Chinese contexts, i.e. cultural and technological structures. To understand what helped TelcoX people to develop their business relationships, the Thirty-Six Stratagems written in the most famous ancient Chinese military strategist Sun Tzu's work - *The Art of War*, offers a useful theoretical lens (Walsham, 1993) in interpreting the case study and structuring the analysis.

6.1.1 *The 36 ji*

'*The 36 Ji*', in a 2300-year-old Chinese treatise on warfare compiled in that historical era, is ancient Chinese military stratagems and tactics for triumph and survival. According to Ghauri and Fang (2001), these stratagems can be

understood as carefully devised Chinese schemes that deal with various kinds of situations and gain psychological and material advantages over one's adversary.

'The 36 Ji' is a unique collection of ancient Chinese proverbs that describe some of the most cunning and subtle strategies ever devised. It is regarded as an outstanding military classic because of its emphasis on deception as a military art. These proverbs describe not only battlefield strategies, but also tactics used in psychological warfare to undermine both the enemy's will to fight and his sanity. It focuses on military organisations, leadership, battlefield tactics and the use of deception, subterfuge or hidden tactics to achieve military objectives.

	In English	In Chinese
The first category: When commanding superiority		
Stratagem 1	Cross the sea by fooling heaven	<i>Man Tian Guo Hai</i>
Stratagem 2	Besiege Kingdom Wei to rescue Kingdom Zhao	<i>Wei Wei Jiu Zhao</i>
Stratagem 3	Kill with a borrowed knife	<i>Jie Dao Sha Ren</i>
Stratagem 4	Relax while the enemy exhausts himself	<i>Yi Yi Dai Lao</i>
Stratagem 5	Loot a burning house	<i>Chen Huo Da Jie</i>
Stratagem 6	Make a feint to the East while attacking the West	<i>Sheng Dong Ji Xi</i>
The second category: For confrontation		
Stratagem 7	Create something out of nothing	<i>Wu Zhong Sheng You</i>
Stratagem 8	Pretend to take path A while secretly taking path B	<i>An Du Chen Cang</i>
Stratagem 9	Watch the fires burning from across the river	<i>Ge An Guan Huo</i>
Stratagem 10	Conceal a dagger in a smile	<i>Xiao Li Cang Dao</i>
Stratagem 11	Sacrifice the plum tree for the peach tree	<i>Li Dai Tao Jiang</i>
Stratagem 12	Lead away a goat in passing	<i>Shun Shou Qian Yang</i>
The third category: For attack		
Stratagem 13	Beat the grass to startle the snake	<i>Da Cao Jing She</i>
Stratagem 14	Borrow a corpse to return the soul	<i>Jie Shi Huan Hun</i>
Stratagem 15	Lure the tiger out of the mountains	<i>Diao Hu Li Shan</i>
Stratagem 16	Snag the enemy by letting off the hook	<i>Yu Qian Gu Zong</i>
Stratagem 17	Cast a brick to attract a piece of jade	<i>Pao Zhuan Yin Yu</i>
Stratagem 18	Catch the ringleader to nab the bandits	<i>Qin Zei Qin Wang</i>

The fourth category: In confused situations		
Stratagem 19	Remove the firewood from under the cooking pot	<i>Fu Di Chou Xin</i>
Stratagem 20	Muddle the water to catch the fish	<i>Hun Shui Mo Yu</i>
Stratagem 21	The golden cicada sheds its shell	<i>Jin Chan Tuo Qiao</i>
Stratagem 22	Shut the door to catch the thief	<i>Guan Men Zhuo Zei</i>
Stratagem 23	Befriend distant states while attacking the nearby ones	<i>Yuan Jiao Jin Gong</i>
Stratagem 24	Borrow the safe passage to conquer the kingdom Guo	<i>Jiao Dao Fa Guo</i>
The fifth category: For gaining ground		
Stratagem 25	Replace the beams and pillars with rotten timber	<i>Tou Liang Huan Zhu</i>
Stratagem 26	Point at the mulberry tree but curse the locust tree	<i>Zhi Sang Ma Huai</i>
Stratagem 27	Play dumb while remaining smart	<i>Jia Chi Bu Dian</i>
Stratagem 28	Take away the ladder after the ascent	<i>Shang Wu Chou Ti</i>
Stratagem 29	Deck the tree with bogus blossoms	<i>Shu Shang Kai Hua</i>
Stratagem 30	The guest becomes the host	<i>Fan Ke Wei Zhu</i>
The sixth category: In desperate straits		
Stratagem 31	The beautiful woman stratagem	<i>Mei Ren Ji</i>
Stratagem 32	The empty city stratagem	<i>Kong Cheng Ji</i>
Stratagem 33	The counter-espionage stratagem	<i>Fan Jian Ji</i>
Stratagem 34	The self-torture stratagem	<i>Ku Rou Ji</i>
Stratagem 35	The interrelated stratagem	<i>Lian Huan Ji</i>
Stratagem 36	Running away is the best stratagem	<i>Zou Wei Shang Ji</i>

Table 6.1: The thirty-six ancient Chinese stratagems
(Source: adapted Ghauri & Fang, 2001, p. 311)

As shown in Table 6.1, various stratagems of six categories for different purposes are featured. With a tremendous influence on a long-lasting cultural tradition shaping the Chinese business behaviour and social systems, nowadays many people continue to turn to these stratagems in doing their businesses. The application of 'the 36 ji' in today's business environment helps to produce and reproduce the emerging wider contexts (i.e. international, social, cultural and industrial contexts). This study draws on these wisdoms as a theoretical lens to interpret the forming of e-relations within and outside TelcoX. Many of the proverbs are based on events that occurred during China's Warring States Era (403 – 221 BC).

Here, we discuss how these wisdoms were used for formation and transformation of e-supply relationships within and outside TelcoX. Those accounts presented in this study include the explanations and examples offered by the application of each stratagem in TelcoX's business relationships development internally and externally. Chapter 8 will detailed discuss the behaviours reported in the study using this theoretical lens (i.e., '*the 36 ji*').

6.1.2 *Guanxi*

In a typical Chinese SOE that is called work unit (*dan wei*), employees are provided with education, housing, medical welfare and other needs (Ding, Goodall, & Warner, 2000). One's social status is determined largely by the *dan wei* to which one belongs. Linstone and Zhu (2000) say that without a *dan wei*, a person's existence is barely recognised. Decision-making is top-down and nothing much is accomplished without support from the higher echelons. Individuals are uncomfortable in expressing personal views and abhor self-centred conversations where the 'I' is prominently used (Linstone & Zhu, 2000). They always seek out the opinion and endorsement of the group. No one is willing to stick his or her neck out, and so new ground is seldom broken, except by those at the very top.

The main features of traditional Chinese 'organisational dependency' (Warner, 1999a) such as the 'eating out of one big pot' (*da guo fan*) and the so-called 'iron rice-bowl' (*tie fan wan*) ensured 'jobs for life' and a 'cradle to grave' welfare for mostly industrial SOE employees (Lu & Perry, 1997).

Leadership seems to play particularly important and multiple roles. The work unit's head (*ling dao*) often exercises authority over family matters such as approval of marriage, divorce, and birth control, which is reflected in employees' internal appraisal and promotion. The notion of 'privacy' simply does not exist in most of Chinese SOEs that are configured by a legitimised hierarchy based upon status overlaid with a system of reciprocal personal

relations and ritual. Thus, '*guanxi*' has become a familiar term among those involved with Chinese society. According to Pye (1986), with its philosophical and moral support from a Confucian ethic, the right *guanxi* helps to maintain harmony in the Chinese system of doing things.

Guanxi refers to a special kind of relationships, characterised by implicit rules, both of obligation and reciprocity (Luo, 1997; Yeung & Tung, 1996). *Guanxi* briefly translated as human relationship or personal connections on which an individual can draw to secure resources or advantages when doing business as well as in their social life (Davies, Leung, Luk, & Wong, 1995). As Luo (1997) argues that *guanxi* are delicate fibres woven into every Chinese individual's social life, and therefore, into many aspects of the Chinese society. Ahmed and Li (1996) explain *guanxi* as fundamental in directing social and personal behaviour in China, referring to it as the relationship between people or organisations which implicitly indicates assurance, understanding and mutual obligation. In China, therefore, the use of *guanxi* is the quickest and surest route to accomplishment. "Who one knows matters, rather than what one knows" (Pang et al., 1998).

With one fifth of the world's population and complex society, the Chinese had developed *guanxi* to obtain everyday necessities, housing and goods that were the prevalent shortages in the past and were also major factors motivating the efforts to form *guanxi* in China (Buttery & Leung, 1998; Pye 1986). More importantly, *guanxi* refers to the establishment of a connection between two independent individuals to enable a bilateral flow of personal or social transactions. Both parties must derive benefits from the transaction to ensure the continuation of such a relationship, and the relation must be nourished and maintained over time (Watt, 1999). It fulfilled the Confucian ideal of reciprocity (favour-exchanging) and helped to communicate and provide for assistance when problems arise (Pye, 1986).

The characters that comprise the Chinese word *guanxi* are '*guan*' and '*xi*'. '*Guan*' as a noun, originally means a door. It is also as a verb of its extended

meaning of 'close up'. Consider in human relationships, a metaphorically thinking provided by researchers as Luo (1997) and Ambler (1995): inside the door, you are 'one of us', but outside the door your existence is barely recognised. Those 'insiders' (*zi ji ren*) are relatives, who come first, and then friends, neighbours, classmates, colleagues and co-workers as well as pretty much anyone who has been introduced by someone belonging to one of these groups. The rest of the world remains 'outsiders' (*wai ren*). They are those people the insiders do not know, and to whom the insiders have no particular obligation. 'Xi' is used as both a noun and a verb as well. In its noun form, *xi* has the meaning of 'a system' or 'a network'. In its verb form, *xi* means to tie up and extends into relationships, such as kinship (*shi xi*) and directly-related members of one's family (*zhi xi qin shu*). It implies the formalisation and hierarchy (Luo, 1997; Ambler, 1995). Simply, *guanxi* refers to the connections between people, or particular people with whom one has a strong link. However, the meaning of *guanxi* can be more than what can be represented by the term relationship or connection.

The four main elements of *guanxi* are: trust, favour, dependence and adaptation (Wong, 1998). Its entire process (e.g. giving face, the exchange of benefits, favours and information) is based on trust (Wong & Chan, 1999; Yi & Ellis, 2000). To enter into a business environment and build and sustain a position within a *guanxi*, a better understanding of '*mianzi*' (giving face) is required. *Mianzi* is a symbol representing respectability, reputation and pride (Pang et al., 1998). In this traditional Chinese context, the concern of *mianzi* is about the giving of face or enhancing of someone's social status. It also makes it difficult to use rewards and punishments to motivate employees in Chinese SOEs. Performance of one's job in the enterprise is less geared to the individual's perception of what one is likely to gain from it, than as calculated in such less tangible rewards as intrinsic job satisfaction (Chao, 1990). Therefore, *guanxi* is not about getting through one negotiation; instead, it is about building up a life-long relationship (Pye, 1986). The idea of *guanxi* gives the reasons why the management system in China is hierarchical and constrained so much by cultural considerations.

From a cultural perspective, the data analysis indicates that TelcoX had a unique cultural context in which a mix of traditional Chinese and Western cultures made it different from the more typical Chinese SOEs. *Guanxi*, a particular factor rooted in Chinese culture, played an important role of shaping e-supply relationships formation and transformation. Chapter 8 will further analyse and discuss how TelcoX's culture influences its evolution of e-supply relationships.

6.2 Shared Technological Change and Customer Service

It has been seen that the information and communication technology (ICT) industries are playing a vital role in the development of national economies and the progress of societies. Many countries' economic development, such as China, indicates that this high-tech industry is increasingly leading the various sectors in the national economy. The availability of newer type of technologies is also influencing the way people live and changing the nature of organisational interactions. At the same time, services account for the largest share of gross domestic product (GDP) in all but the lowest income countries, and are crucial components of the production chain (Dicken, 1998, p. 31). Persistent poor service quality will have a harmful impact not only on the survival and growth prospects of service industries and firms but also on their relationships with customers. The speeds of customer service and communication styles are seen as important factors of relationships between buyers and sellers (Wilson & Jantrania, 1995).

Emerging ITs, however, make it possible to deliver an efficient customer service (Brohman, Piccoli, Watson, & Parasuraman, 2005). Many firms today are racing to re-establish their connections to new as well as existing customers to develop and maintain long-term customer relations (Chen & Popovich, 2003). There is an agreement that organisations can create customer value through customer service improvement by using ITs (Ives & Learmonth, 1984; Ives & Vitale, 1988; Ives & Mason, 1990; Feeny, 2001). As a result, some

firms are competing effectively and winning this race through the implementation of technology-based CRM applications.

CRM is considered as a tool specifically designed for one-to-one customer communications (Peppers & Roger, 1999), or a business process initiative toward building customer-centric organisations based on a relationship marketing principle. Chen and Popovich (2003) state that CRM is not merely technology applications for marketing, sales and service, but rather, when fully and completely implemented a cross-functional, customer-driven, technology-integrated business strategy. A CRM business strategy leverages marketing, operations, sales, customer service, human resources, research and development (R&D) and finance as well as IT and the Internet to maximize profitability of customer interactions. CRM has grown into a full-blown management discipline.

By combining computer technology to call centre technology, an intelligence component has come about (Prabhaker, Sheehan, & Coppett, 1997). Prabhaker et al (1997) explain that the right combination of technology can open up business opportunities to gain new customers, increase the value of customer purchases and improve customer service. Kislowski (1996) says that call centre technology is not just being deployed to meet customer demands; it is actually leading or pushing some of the change. Apparently, for many businesses, the call centre is now not only a necessity to maintain competitive parity, but also a world-class capability providing a strategic advantage (Rappaport, 1996).

As introduced in chapter 1, in order to execute a CRM strategy, a new call centre development as well as implementation and use of CSS in TelcoX therefore are understood as specific e-technology that enable organisational relationships. From a technological perspective, an in-depth analysis will be presented in chapter 10.

6.2.1 The development of the call centre

Historically, call centres have focused on operational excellence. Whereas, call centres are now being relied on for ensuring customer satisfaction and used in sophisticated ways to achieve specific goals, which hardly resemble the “availability of an 800 number” centre of the past (Prabhaker et al., 1997). Rappaport (1996) claims that the goal of call centres has been to efficiently distribute calls to knowledgeable agents, but the voice-only call centre agents can no longer meet today’s service demand with telephones and paper reference manuals.

The modern era of call centres, it is considered, probably begins in 1974 (Rappaport, 1996). Changes in market conditions and trends, such as fierce competition and increasingly demanding customers, point to the need for changes in the marketing approaches being used (Prabhaker et al., 1997). Kislowksi (1996) analyses that three important forces are driving call centres to renew. Firstly, customer demands for more convenient access to goods and services, business pressures to drive down costs, and the convergence of computer and telecom technology. Secondly, business direction relates to how businesses are striving to provide direct channels and drive customers to use them, while keeping costs at a minimum. Thirdly, the improvement of technological capability, more precisely, computer telephony integration (CTI). The merging of computers and telecom, including public and private networks, hardware and software, is occurring faster than ever before and providing business with more efficient and powerful call centre solutions. The call centre industry has grown from being a small niche-based industry in the 1980s to a formidable industry in the 1990s fuelled by tremendous growth (Prabhaker et al., 1997). Much has changed as call centres have become a major component of sales and service strategies in the more than 30 years.

Therefore, in today’s e-technology enabled service businesses, advances in call centre technologies not only provide organisations vastly improved capabilities in the marketplace, but also provide customers of products and services

improved choices in meeting their needs (Prabhaker et al., 1997). Call centres deal with both telephonic voice-to-voice and voice-to-telephony (interactive voice response) contact between the customer and the firm (Burgers, Ruyter, Keen, & Streukens, 2000). Its functions are much broader than the traditional ones. Prabhaker et al (1997) explain that the technological foundation of call centres creates certain unique capabilities for this marketing tool that can then be transformed into improved market performance.

Hence, an increasing number of firms use call centres as communication platforms to integrate services and other functions in responding to large numbers of customers' demand via remote, real-time contact. Call centre, both as an interaction channel and as an important source of customer-related information, are becoming increasingly important for delivering customer service (Miciak & Desmanais, 2001). As Miciak and Desmanais (2001, p. 351) state that "call centres are changing the way companies communicate with customers and are a strategic asset in delivering exceptional service quality."

6.3 The Interaction Environment

According to Interaction Model (Håkansson, 1982), one of the basic elements of this model is the environment within which interaction takes place. Market structure, dynamism, internationalisation, position in the manufacturing channel and the social system are aspects in this wider context of an interaction environment (see Figure 4.2 in chapter 4). In this study, the interaction environment includes international, national, social, cultural, technological, industrial and organisational structures.

Internationally, increasing customer demand, complexity of services, e-business which is enabled by the application of newer type of ITs, outsourcing and globalisation are key drivers for changing webs of relationships dynamically in the supply networks (Harland et al., 1999). The rapidly growth of China's telecom, after its major reforms and restructuring since late 1990s, is also driven partly by the emergence of competition in the global telecom market. As

a result, industrial innovations and implementations of new strategies in Chinese enterprises for gaining competitive advantages are required.

The telecom enterprises have been developing new ideas on market competition through the innovations in customer service and co-operation between suppliers, customers and competitors. An increasing number of enterprises are paying more attention to exploring new business opportunities while meeting their existing customers' needs; simultaneously, they are developing win-win business relationships with their business partners in order to effectively utilize the resources and investments, to develop national competitive advantages in this industry, and to implement strategies for competing globally.

The turbulent environments are becoming more common, Terreberry (1968) concludes that the evolution of the organisational environments is characterized by a change in the important constituents of the environment. Along with the high market competition and the rapid changes of environment, the telecom enterprises begin to realise the importance of leverage in different functions through co-operation between and across business units and departments within an organisation. Some large Chinese telecom enterprises adopted new IS such as CRM, ERP that enabled quick responses to customers and further strategy formulation. These traditional Chinese SOEs are transferring to the new type of enterprises that are enabled by the application of emerging ITs. Over time, new business models influence Chinese business behaviour which has an effect in building relationships.

From a strategic management view, there is an assumption that "the real world which surrounds the organisation is a dynamic construct enacted by the members of the organisation over time" (Hurst, Rush, & White, 2004, p. 500). This view is shared by Weick (1979, p. 228), as he explains, "the environment is viewed as an output rather than an input. On the basis of enactments and interpretations people construct a belated picture of some environment that could have produced these actions." Therefore, the examination of the effects of both internal and external factors influencing e-relationships development is

central to the study in order to better understand the dynamics and complexity of the process of e-relationships formation and transformation. From a structurational perspective, chapter 11 will discuss how human actions and business environment interact with each other. It also covers discussions on the dynamics of e-supply relationships as well as the structuring of e-technology-in-use in TelcoX's wider network context.

6.4 Supply Chain Management in China

With the development of global manufacturing, SCM emerges as a new-type management mode since the 90s in the last century in China. Structure models of SC have been introduced and proposed to be helpful to research on SCM, which are enlightening to the reorganisation of Chinese SOEs (see Bi, Zhu, & Liu, 1999). Value chain theory has been widely applied in strategy analysis by enterprises in China (see Hu, 2002; Wang, Wang, & Li, 2001; Zheng, 1998; Xiong, 2001). Confronted by the challenges and opportunities stem from the revolution of IT, manufacture enterprises are thronging to carry on implementations and outsourcing on the basis of their internal and external value chain analysis (see Li & Zhao, 2003; Lei, Liu, & Han, 2004). Strategic management and cross-culture working are focuses in the localisation (see Wei & Zhang, 2004).

Localisation therefore is becoming a strategy to meet the rapidly increasing demand of customers in the target international markets with the deepening of the globalisation, as Jiang (2002) says that many foreign companies localise their SCM in China either through a wholly-owned SC or by using local outsourcing.

Moreover, there is a considerable agreement about the direction of change, especially changes before and after China's entry into WTO. Joining the WTO forces the changes needed to modernize China's economy. After entering into WTO, China is confronted with many challenges from multi-national companies in doing their business in China. Under these circumstances, quite a

few large Chinese enterprises, with strong competition abilities, are coming into being and taking the lead in China's SCM. They are developing co-operative relationships both at home and abroad, becoming competitors and co-operators in the global market as well.

In the world's largest potential market, more and more foreign companies are also entering China to leverage the country's resources, such as cheap labour costs and establish longer-term competitive advantages (Jiang, 2002). There is evidence that supply people in China are making a greater strategic contribution than before (see Chen & Chen, 1998; He & Jiao, 2003; Ma, 2002; Wang, 1995; Zhang, 2003).

In addition, the Chinese government plays an important role in the development of e-business (Dong, 2000b; Liu, 2003; Wang, 2001; Xia, 2000; Zang, 2002; Zhao & Xu, 2002). As a result, globalisation and e-business are key aspects of the changing business context which will have an influence on SCM in future-focused studies in China (Chai, 1996; Xu & Hu, 2004a).

Figure 6.1 shows the selected Chinese industrial contexts in which this research is conducted. The wider research area can be divided into three main areas: China's telecom industry; electronic IT Industry; and the Internet industry.

As illustrated in Figure 6.1, this study aims to understand 1) the impacts of Internet technologies on the telecom industry by studying Internet and telecom industries' structures; 2) the impacts of ITs on telecom services by exploring the issues relating telecom and IT industrial contexts; and 3) the impacts of Internet and the convergence of IT on e-commerce by identifying the key factors in Internet and IT industrial contexts. The remainder of this chapter will discuss in detail these research areas.

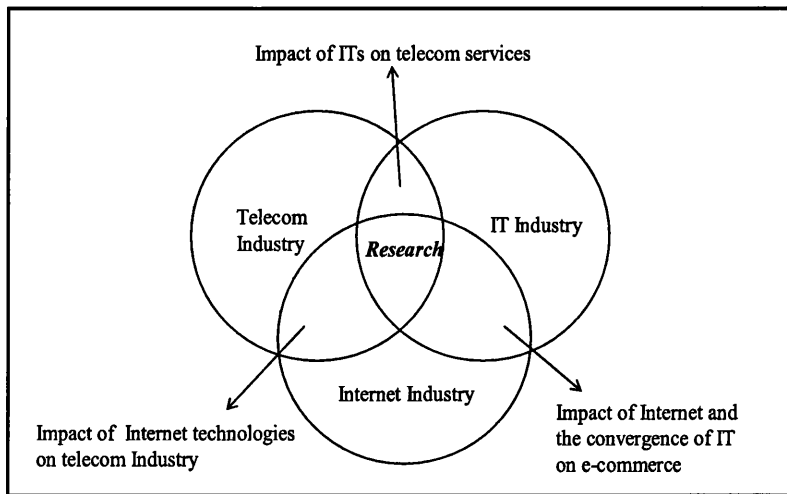


Figure 6.1: The wider research area

6.5 China's Telecom Industry

In the past two decades, China's telecom industry has undergone dramatic changes in terms of the regulatory environment, infrastructure development and services. Wu (2000) explains that several factors have contributed to the fast expansion of China's telecom industry. Firstly, a dramatic expansion in economic activities and a great increase in demand for telecom services required an expanded system to meet the demand for both business and personal communications since the implementation of the 'economic reforms' in the late 1970s.

Secondly, Chinese policy-makers have increasingly recognised the importance of the telecom industry in economic development. In particular, they have learnt from international experience (see Hardy, 1980). The series of major policy-decisions made by the Chinese government on telecom development are quite praiseworthy. It is worth noting that over the past few years China has adhered to a stable and pragmatic policy in telecom development which, to the greatest extent, helped avoid the impact of a bubble economy.

Finally, recent growth in China's telecom industry is also driven partly by deregulation and the subsequent emergence of competition in this industry.

6.5.1 Major industrial reforms and restructuring

Since 1978 the Chinese government has maintained an 'economic reform', opening China to the outside world (She & Yu, 1993). In accordance with the requirement of the economic market and to facilitate its own development, China's telecom industry has undergone a series of major reforms over past two decades. The reforms and restructuring have enabled the industry to break centralised monopolisation, introduce competition in value-added markets that has resulted in the continuous decline in the price level and promote the rapid development of the entire industry.

During the early stage of reform and opening-up, China's economic strength could not meet the telecom sector's demand in development. However, the government worked out a series of policies to support and propel the development of the industry. According to Chen (1993), the Ministry of Posts & Telecommunications (MPT) of China was an exclusive provider for nationwide postal and telecom service. The MPT was responsible for both the administration and management of the posts and telecom industries. China Telecom was part of the MPT without independent financial accountability and was not a real enterprise. This pre-reform system was highly centralised with little autonomy and most of the public network facilities were owned by the state and operated by the MPT.

As shown in Figure 6.2, MPT became a total monopolistic institution until being restructured with the Ministry of Information Industry (MII) in 1998. At the top, MPT was responsible for overall planning and management of the telecom industry. It controlled provincial communications and also set technical standards and formulated key policies and plans (Qian, 1993). At the provincial level, the prefecture offices of postal and telecom bureaux (PTB) and postal and telecom administrations (PTAs) performed a similar role within the provinces. County-level of postal and telecom enterprises (PTEs) operated local service networks in the county capitals and extended lines into the surrounding rural

areas. Below them, branch offices operated exchanges at the village level. There were also many private branch exchanges (PBXs) owned and operated by work units and rural villages.

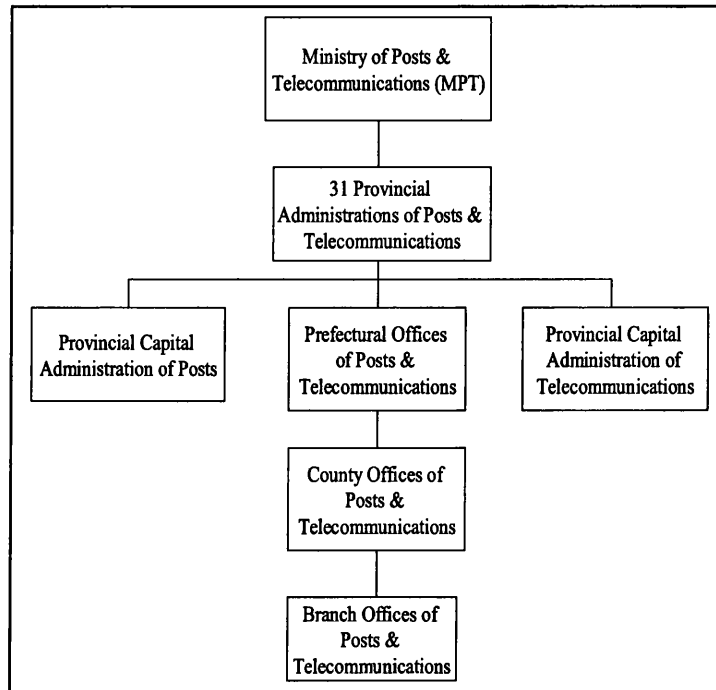


Figure 6.2: Telecom organisation in China (before reform) (*Source: Chen, 1993*)

As a result of the opening of the economy to the outside world, the Chinese government came to realise that the telecom infrastructure would have to be dramatically improved. Aiming to separate the operation of telecom from that of post and to gain WTO accession (Loo, 2004), the Chinese government decided to separate the administrative and operative duties of the MPT. Hence, the organisational structure of China's telecom sector has changed.

In 1998, the administrative functions of MPT were merged into the new MII and China Telecom became a telecom carrier independent of the MII. The aim of the bureaucratic restructuring is clearly to consolidate the government's regulatory role, to separate regulation from operation and to create an environment for fair competition. This institutional reorganisation was a major landmark in China's telecom reform because regulation and operations were

formally separated for the first time since the establishment of the People's Republic of China (Loo, 2004).

The overhaul of the bureaucratic system was companied by the reform of the telecom enterprises. Subsequently, the MII took two large-scale industry reshuffling actions targeting the China Telecom. A series of break-up and split-off activities happened in 1999 and 2002 made the former China Telecom primarily a monopoly of fixed-line networks and services. Only in this way, can they sharpen their competitive edge. Reform of the telecom sector has further stimulated demand. The objective of this reform initiative is to break the monopoly of the old China Telecom and hence to promote competition among the providers.

Through these reforms and restructuring, China's telecom industry and information service market has changed from a highly regulated market dominated by the monopolistic China Telecom and has formed a pattern featuring the mutual competition and joint development of six key multiple service telecom carriers as well as a number of SMEs. The changes in the market pattern have stimulated various telecom enterprises to transform their mind-sets and operating mechanisms, accelerate the establishment of a modern enterprise system. After the reorganisation of the telecom industry, China is setting up a fair, orderly and competitive telecom market. Nevertheless, China's telecom industry still faces many new problems and challenges.

6.5.2 Development of the telecom services

Tan (2002) categorizes the telecom industry into two sectors: manufacturing and service provision, where contrasting policies regarding foreign direct investments (FDI) have been implemented. The manufacturing sector has followed China's overall pro-foreign investment policy with a conventional goal of helping indigenous manufacturers to acquire foreign capital, advanced technologies, management knowledge and market accesses. In contrast, the 'no

foreign direct investment' policy has been instituted in China's service provision sector, based on its economic, political and social concerns.

From 1990 to 1999, an annual increase of 32.1 percent has been achieved in telecom industry and only in 1999 over 30 billion RMB of profit is gained (Asiainfo Daily China News, December 13, 2000). The continuous and rapid increase of China's telecom industry indicates that the policy of China to expand domestic demand has gained great achievement in the realm of information communications (Asiainfo Daily China News, December 30, 2001). MII states that telecom operators in China generated a combined revenue of 102.98 billion RMB (US\$12.4 billion) during the first quarter of 2002, reflecting a 14.9% revenue growth year on year despite the global market slowdown (Emerging Markets Economy, April 8, 2003).

A high growth rate in China's telecom industry with the reform deepened and legislation process accelerated (She & Yu, 1993; Chen, 1993). According to MII (2003), the number of telephone users in China became the world's largest in 2002, with telephone service coverage expanded to over 200 countries. Mobile communications has become a major revenue source; it attracted more than half of all telecom infrastructure investments in 2000 and 2001. In terms of business volume, mobile communications is catching up with fixed-line telecom services to be an alternative for users to make local telephone calls. In the long-distance telephone market, the traditional services are losing market share to both mobile services and IP telephone services.

Although already being one of the largest in the world, China's telecom sector will continue to expand in the coming decades. Further deregulation and subsequently increasing competition will lead to an expansion in demand. Growth-driven demand for telecom services will increase continuously. It still has a long way to go to match its counterparts in the developed economies. The tremendous growth in Chinese telecom has opened up a huge market to foreign manufacturers of telecom equipment. This gap implies the huge growth potential for China's telecom sector. Thus, this growth will boost China's

overall economic growth and create opportunities for global telecom (Wu, 2000).

6.5.3 China's telecom and the WTO

Since only foreign equipment vendors were allowed to invest in the Chinese telecom industry, and international telecom carriers were banned from accessing the market before China's entry into the WTO, Mueller and Lovelock (2000) examine China's telecom reforms by focusing on international factors that bear on China's reforms, in particular, the WTO accession and China's ban on foreign investment in telecom services. They develop a model of China's important institutional actors and relationships and conclude that China would not have opened up to foreign investment in telecom services without the need to bargain for WTO accession.

From 1986, China started negotiations with various WTO members for the country's accession to this multi-nation organisation (Loo, 2004). According to Mueller and Lovelock (2000), in April 1999, China agreed to open its telecom services sector to foreign investment. China's key telecom services markets in major cities such as Beijing, Shanghai and Guangzhou would be opened immediately upon accession. Those markets represent approximately 75% of all domestic traffic. In order to fulfil this agreement China has negotiated a set of scheduled commitments that will allow 49% foreign equity investment in all telecom services and 51% foreign ownership for value-added and paging services in 4 years. China's telecom regulatory is poised to improve significantly and China is moving to increase orderly competition.

China officially became a member of the WTO on December 11th, 2001 (Meng, 2001) after 15 years of negotiation, solid steps to address imminent challenges ahead continued. Meng (2001) reports that China's WTO membership is expected to promote the country's own reform, opening up and economic development, boost confidence in global economic growth and secure the development of the multilateral trade mechanism. In the process of reform and

opening over the past two decades, great changes have taken place, and it will bring China's multi-faceted reform to make significant and rapid improvements.

More importantly, WTO accession could be a catalyst for fundamental reforms in the telecom industry. Under the framework of WTO, legal guidance for China's domestic telecom law has been provided and benefits can be gained. There is an agreement that, firstly, the government only exercises supervisory power over the telecom industry instead of direct control. Thus, the separation of enterprise from administration can be achieved. Secondly, facing new competition, the enterprises will be forced to fully exploit new technology to provide the most updated and best services to the customers. Thirdly, the growth of the local enterprises will lead to more job opportunities and an increase in the government's tax revenues (Asiainfo Daily China News, December 22, 1999).

To comply with the WTO requirements and to provide adequate legal protection to foreign businesses, China's administrative and legal environment must be further developed toward internal consistency, completeness, transparency and enforceability (Shao, 2001). Consequently, the telecom industry faces a huge impact from the country's entry into WTO. WTO accession and regulatory change are opening up a variety for foreign involvement and will continue to provide some support with economic mechanisms that are more harmonised to those of the advanced market economies (Liu, Liu, Wang, & Woo, 2001). Foreign telecom enterprises will enter into Chinese domestic market in an indirect way (i.e., through stock market and technological investment) or direct way (i.e., directly intervene in the management decision and operation, including the network construction, purchase decision, investment scale and commercial operation mode) (Asiainfo Daily China, July 19th, 2002).

Therefore, WTO membership provides opportunities for foreign operators to take part in the operation of basic and value-added telecom services in the form

of joint ventures immediately upon Chinese accession. International telecom equipment vendors will continue their focus on China, which will also remain their most important markets in the global competitive environment. Honouring its WTO commitments, China has opened its value-added telecom business to foreigners. British Telecom (BT) - one of the largest telecom operators in Europe – became the first foreign company to enter China's telecom sector after the nation joined the WTO (China Daily, March 8th, 2002). China's international position as a major telecom market worldwide will be further consolidated.

In conclusion, WTO has influenced China's telecom regulatory reform and its industrial liberalization. The driving forces placing it on track toward liberalization come directly from pressures surrounding China's entry into the WTO, a rule-of-law-based institution. However, how far and how fast China will go along the current regulatory and industrial restructuring route in the future will largely depend on the institutional stances taken by China's government, which is affected by domestic policy constraints and counter-competitive forces in the short run, and determined by political and economic reform in the long run (Zhang, 2001).

6.6 Electronic Information Technology Industry in China

As reviewed in chapter 3, globalisation is driven by pervasive ITs and they now form an integral part of the pace of globalisation (Moodely, 2002). Since 1978 China's electronic IT industry has been advancing at a high speed, having far-reaching and favourable influence on other sectors of the economy. Chinese policy makers also realise that today's industrial economy has been changed by IT. In China, the growth of IT and the associated IT has been greatly promoted since the campaign of informationization of the national economy started in the early 1990s.

In the development of the IT industry, as seen that China has made good progress in the fields of software research and development (R & D),

conversion into commercial products, and market exploitation through the late 1990s. The advancement of IT has become a national priority. Currently the telecom, science, technology and education sectors as well as government institutions have their networks and databases connected to the Internet. China's Internet industry will be reviewed in the following section.

6.7 The Internet in China

As discussed earlier, the Internet is becoming a key enabler of the global networked economy (Moodely, 2002). In addition, with government reform moving across the country, the Internet was booming in China. China started to implement Internet in the late 1980s and officially became an Internet member in 1994 (IDG, 2004). Network information service is now one of the fastest growing industry sectors.

The country's economy is rapidly growing; the Internet has been set up to meet the demand for sharing resources, exchanging information and promoting communication. Unsurprisingly, the Chinese authorities have always paid special attention to Internet development by providing the initial funding, regulations and standards for the networks (Wu, 1996). The Internet's rapid growth has provided a medium for communication and information, as well as a potential for economic growth.

6.7.1 The opportunities and challenges of the Internet

As commercial Internet projects had begun to emerge, it has changed the relationships between global companies and their business partners greatly. In a highly-networked world and newly emerging markets such as China (Shanks et al., 2000), most strategic alliances aimed at meeting a set of predetermined goals. These include increasing market penetration, new product development, gaining technical or vertical segment expertise and entering new areas such as SCM or CRM.

SCM and Internet

The research revealed that the most popular use of the Internet for SCM is in transportation, followed next by order processing, managing vendor relations, purchasing procurement, and customer service (Lancioni et al., 2000). The impact of the Internet can be studied on all the aspects starting from the supplier side to the enterprise environment and then moving on to the end customer side.

The Internet has proven itself to be an important form of communication between customers and suppliers. As seen more and more organisations are building automated links and transaction processes with their business partners in a SC by implementing information systems such as EDI and e-procurement.

As discussed in chapter 2 with the application of the Internet to purchasing and inventory, the Internet has caused dramatic changes in the traditional methods of procurement and inventory management. It will become more popular as technology develops and therefore the use of the Internet in SCM is rapidly increasing. The Internet has and will continue to provide logistics managers with the fast and accurate information that enables them to improve the profitability of their supply chains (Lancioni et al., 2000).

CRM and the Internet

The Internet is dramatically affecting the ways by which businesses are providing customer services. Lancioni et al (2000, p. 45) say that the growth of the Internet has presented SCs with many significant opportunities for cost reduction and service improvements. These opportunities include:

- The ability to provide 7 day, 24 hour worldwide customer service
- The ability to pay invoices electronically and to check outstanding debit balances

- The ability to communicate directly with vendors, customers, etc. regarding supply issues on a 7 day, 24 hour basis via e-mail
- The ability to be more responsive to customer service problems

The Internet has provided firms with the ability to offer their customers another way to contact the firm regarding service issues. It also gives customers 24 hour access to a company's service department, enabling customers to immediately notify companies of any service issues or problems that may arise. The overall effect has led to reduced response times and resolutions of customer service problems. The Internet has improved the two-way flow of communication between firms and their customers. This two-way communication capability can have a profound effect on cementing supplier-customer relationships. The Internet can build strong product and service loyalty if used appropriately in the customer service area.

6.7.2 Impact of B2B e-commerce

Commerce is the main driving force for Internet use in China, especially for people engaged in international business. The emergence of the Internet as a general communication channel has given rise to the possibility of widespread B2B e-commerce. E-commerce is being used by a variety of businesses to facilitate communication between suppliers and customers both domestically and internationally. Easton and Araujo (2003) argue that the impact of e-commerce on their activities is one of the most important issues that B2B marketers and those of the firms they sell to face.

In addition, e-commerce encompasses a range of electronic interactions, e.g. logistics, procurement and administrative processes, between a firm and its' upstream and downstream business partners that take place via an Internet-based network (Moodley, 2002).

Since the Internet has become increasingly important to organisations for certain aspects of e-commerce and many organisations have set up Web pages

to capture the attention of potential buyers and to develop new business relationships (Barua, Ravindran, & Whinston, 1997), the China international e-commerce was established in 1996 to assist Chinese enterprises in the use of e-commerce to conduct international trading. The main role of e-commerce in China is seen as an electronic trade fair where Chinese enterprises can introduce their products and capabilities to foreign companies.

Internet-based B2B e-commerce offers unprecedented opportunities to both developing and developed countries (Panagariya, 2000). A world within which organisational support systems is seen are seamlessly integrated with the emerging methods of e-commerce. It is certain that business processes will be shared and passed across the value chain (Moodley, 2002). Panagariya (2000) states that e-commerce offers developing countries the opportunity to become exporters of products purchased by foreign governments. The benefits from e-commerce to a developing country are therefore both domestic and international. This idea focused on fiscal authority and the promotion of trade liberation, leading to increasing international competition, along with increasing opportunities for exports (Habib & Padayachee, 2000). Thus, the key challenge confronting China's international business is to participate in global business processes.

E-commerce thus presents China's telecom and IT industries with the opportunities to expand their markets through enhancing international business via the Internet. The Internet is rapidly gaining popularity in China. The economic benefits made possible by the Internet are attractive to both the central government and the Chinese public.

By developing Internet technology China can extend its Internet service to more users. With international business as a major economic driving force, China should be able to take full advantage of e-commerce via the Internet and continue to accelerate its Internet development.

6.8 Concluding Remark

The wider context of e-supply relationships that were taking place in this study involves several critical aspects, e.g. the Chinese cultural and technological contexts, current situation and further development of SCM in China, and the role of electronic IT and Internet industries in China's e-commerce. These address the important issues of the impacts of globalisation and WTO on telecom industry in China.

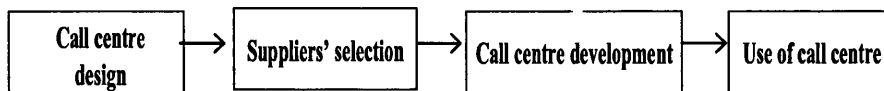
This chapter presents the achievements of the economic growth of China over past two decades. In addition China's entry to the WTO will benefit the global market and international business in global telecom industries. At the same time, China is confronting great challenges in further systems reform in terms of legal system and key industrial reconstructions. This will affect China's economic growth in the competitive global environment in the future.

It also suggests that developing countries, such as China, should concentrate on the e-commerce-driven globalisation while increasing overall economic growth. Therefore, increase exports can be achieved by firms moving up the value-added service in SCM, which will help them to become major beneficiaries of globalisation.

Chapter 7

THE ADAPTATION OF A NEW CUSTOMER SERVICE SYSTEM IN TELCOX

After the presentation of the wider context of this study in chapter 6, this chapter further describes the details of the adaptation of a new CSS system in TelcoX. In order to provide an overview of this study, a timeline is provided for sequential portrayal of events:



This timeline is used to highlight key events of this study, which had particular significance for the forming and transforming of e-supply relationships. Section 7.1 to section 7.4 provides the details of each stage. The emergence of intra-organisational relationships in TelcoX is covered in section 7.5. The dyadic, chain and network relationships establishment with suppliers are discussed in section 7.6. Conclusions are derived in section 7.7.

7.1 Call Centre Design

This study mainly focused on the Customer Service Department (CSD). One director, one director assistant, three senior managers, three managers and four team leaders were managing the CSD that was providing all TelcoX's product users with pre-and post-sale customer services and support. Customer services and support at CSD was a complex activity. Call centre operation was one of the CSD's main responsibilities. At that time call centre services had been outsourced. Customer calls went to a given number and then customer service representatives (CSRs) in that call centre transferred those calls that could not be handled to the CSD. That meant the CSD carried out problems management once the calls were transferred. With stand-alone computer support and simple

applications, CSD people recorded customer calls and did their own calls analysis.

Adhering to the service idea of 'at the speed as light', and 'leading in service', TelcoX followed 'customer first' as its guiding principle to provide customers with first-class and individualised services. With the ever-competitive nature of the telecom industry, the customer service of TelcoX adopted the working guideline of 'activism and prevention'. In early 2001 the CSD director initiated the idea of a 'distributed call centre' which received the support of TelcoX's vice president. The proposed system, then called the CSS system, was developed for tracking customer calls and providing better services and support to all TelcoX's product users.

Although a customer relations strategy has to come first, it can be effectively supported by technology, such as CRM technology. In preparing for designing a new call centre, CSD people were involved in customer surveys and knowledge search. From these searches, they came to realise that understanding their customers' needs enables them to build better relationships and increase sales. They also found explanatory implementation in Western companies and gained experience from other companies that practising CRM helps companies to stay close to existing customers and win new ones. These concepts and operations were then adapted to their local context.

After a couple of months' work on the call centre design, the managers and team leaders accumulated knowledge and experience. As the Director of CSD explained:

"The former call centre was a simple one; it just transferred incoming calls to the departments concerned. At that time, we tried our best to explore new accounts neglecting the expansion of services for the existing customers. We explored a new account with efforts four or five times more than providing the new services for an existing customer. Now, we attach

importance to exploring new accounts. At the same time we pay more attention to improving services to the existing ones.”

Thus, CRM may be viewed as a customer-centric model designed to support the supplier-customer relationships. And, the new call centre aimed to help TelcoX to gain an understanding of its customers' need through analysis telephone calls. Finally, they proposed that this new system CSS built up on China's special national conditions, which had broad coverage. The new CSS was designed to support in total more than 30 call centres and sub-centres in main cities and branch offices all over China including the headquarters in Beijing.

7.2 Suppliers' Selection

To build its system to meet the technical requirements of CRM, a supplier's selection process was employed in CSD to ensure prospective suppliers meet the criteria required. This process was seeking to ensure that high technology, organisational and industrial standards were met. With serious evaluation, two American companies, Supplier 1 and Supplier 2 (see Figure 7.2), were selected as CSD's new system providers as they met criteria set out by the CSD.

Supplier 1

Supplier 1 was the world's largest IT American company. It had over nearly 100 years of doing business in the field of information-handling. During the 60's and 70's last century, it came to dominate the new field of mainframe and minicomputers. Supplier 1 operated in more than 160 countries worldwide. It was expressed in an ever-changing corporate culture, in transformational strategies, and in new and compelling offerings for customers.

Drawing on resources from across Supplier 1 and its key business partners, Supplier 1 offered a wide range of services, solutions and technologies through

the use of advanced ITs, IS and products, which enable customers to take full advantage of the new era of e-business.

Supplier 1 was also one of the largest providers of both software and semiconductors. Since it helped pioneer IT over the years, TelcoX selected Supplier 1 as an IS integrator providing their database to support CSS. It was classified as the first tier supplier.

Supplier 2

Supplier 2, an American company, was the world's leading provider of CRM solutions in call centre industry. It helped companies automate and manage their customer service operations such as sales and marketing. Supplier 2 provided CRM solutions for any kind of organisation and any type of user. It was also a leading service provider of applications for business intelligence and standards-based integration. With more than 4,000 corporate customers worldwide, Supplier 2 provided organisations with a set of industry-specific practices, CRM applications, and business processes, empowering them to consistently provide superior customer services and establish customer relationships. As Supplier 2's call centre and service products allow organisations to deliver consistent, world-class service while driving down the total cost of ownership through greater productivity and reduced costs, TelcoX selected Supplier 2 as its CRM solution and hardware component provider for system integration. Therefore, Supplier 2 was classified as the second tier supplier.

Besides system support, customer service representatives (CSRs) who communicate with customers directly played a very important role in the call centre. When dealing with customers' complaints and solving their problems, CSRs were required not only to promote their services but also to find out new business opportunities. It was believed that only qualified people with certain knowledge and quicker reactions as well as insights could meet these requirements which differed from those in former call centres. These CSRs

were trained with CRM ideas and advanced systems. Employing people was not a core business of TelcoX, hence Supplier 3 was chosen for call centre outsourcing services.

Supplier 3

As an American joint venture company, Supplier 3 was regarded as the first and the largest call centre outsourcing provider with experiences in recruitment in China. It expanded its service offerings to some local and multinational companies.

Supplier 3 was evolving from a basic call centre into a multi-channel customer contact centre during the years of operations and business development. New services were being added to the call centre operation to meet market requirements and to obtain the important competitive advantages. Two main forms of outsourcing services were 'on the spot' and 'not on the spot'. 'Outsourcing on the spot' meant that a customer uses the equipment, all kinds of resources and services provided by Supplier 3 within the customer's company. While 'outsourcing not on the spot' required all of those were operated within the service provider site. Besides, there was another outsourcing form that required consulting, operation and services and all kinds of non-core business to be run by Supplier 3 for a period of time before resumption of operation by the customers themselves. It was called 'enterprise-self-establishment'.

With principles of customer-centricity and professionalism, Supplier 3 was engaged in providing special-care after-sale services. Management team and key members had substantial work experience in foreign enterprises or abroad.

There were more than 500 employees in Supplier 3 in China. Most of them were university graduates. Among them the senior management team members were higher qualification holders, while the others were with certain skills although high qualifications were not emphasised. The internal promotion

program enabled Supplier 3 to retain well-trained supervisors, managers and engineers.

During years of management and operation, Supplier 3 had trained and promoted numerous managerial and technical talents for China's emerging call centre industry. Over 180 renowned enterprises in different industries including telecom, finance, IT, automobile manufacturing, insurance, securities and health, had chosen Supplier 3 as their business partner. With its main effort in outsourcing, Supplier 3 provided services to TelcoX and TelcoX paid for their outsourcing services without needing to become involved in recruitment.

CSRs play a critical role in a call centre and are employed to serve as a direct point of contact for customers. CSR jobs are viewed as good introductory positions into a company. Since CSRs are responsible for ensuring that customers receive an adequate level of service or help with their questions and concerns, all those CSRs provided by Supplier 3 interacted with customers in response to inquiries about products or services, to provide information and to handle and resolve complaints in TelcoX. They were provided with some training prior to beginning work.

CSRs' training generally covered four primary components: (1) training in customer service and telephone skills; (2) training about TelcoX's products and services or common customer problems; (3) training in the operation of the telephone system and use of the new CSS system in TelcoX; and (4) training on TelcoX's business conduct guidelines and regulations. Most CSRs continued to receive instruction and training throughout their jobs. This was particularly important for CSRs working in a telecom company such as TelcoX, in which regulations and products were continually changing. They communicated with customers mainly through telephone, fax and e-mail system in their daily work. Table 7.1 presents the background information about these three main suppliers of CSD.

Suppliers	Firm Type	Sector	Product	Ownership
Supplier 1	<ul style="list-style-type: none"> • IT Service provider • IS integrator 	<ul style="list-style-type: none"> • IT 	<ul style="list-style-type: none"> • Services • Solutions • Software • Semiconductors • minicomputers 	<ul style="list-style-type: none"> • U.S. parent with nearly 100 years operation history • International company (more than 160 companies all over the world)
Supplier 2	<ul style="list-style-type: none"> • Specialised provider (e.g. hardware component) 	<ul style="list-style-type: none"> • Call centre 	<ul style="list-style-type: none"> • Service • Solutions 	<ul style="list-style-type: none"> • U.S. parent • International company
Supplier 3	<ul style="list-style-type: none"> • Outsourcing (call centre) service provider 	<ul style="list-style-type: none"> • Call centre 	<ul style="list-style-type: none"> • Outsourcing service • CRM solutions 	<ul style="list-style-type: none"> • Sino-US joint venture

Table 7.1: Background information about suppliers

7.3 Call Centre Development

During the call centre development, CSD managers and team leaders collected many detailed cases from other companies and kept developing those cases. Several months later, they found their ways, things were getting better. The Director Assistant of CSD recalled:

“It was a very nice memory. We worked very hard and blindly at first. Just like kids trying to write words nicely, but they put in extra energy and great effort for silly words. Like the beginners play Shaolin Gongfu [a Chinese Kongfu, a form of boxing]... very hard, extra energy, great efforts ...”

It can be seen that everyone gained experience during the process of discussion. Finally, they got to know what they should do and why; also, ‘what they would like to do’ instead of ‘they have to do.’

With the great effort of the CSD people, the developed call centre was operated with a practical workflow, strict service quality standards and a comprehensive and effective service quality management system. In Beijing's call centre, there were about 70 people and with the exception of a small number of the second line support from CSD; most of them were the first line CSRs that were outsourced and provided by Supplier 3.

The call centre was divided into four teams: customer calls went to the first team CSRs who were rarely away from their desks and solved customer calls with brief responses on the spot, typically involving customer inquiries and complaints handling and call transfer to relevant functions. The second team was general support that helped to handle those customer inquiries and complaints transferred by the CSRs that needed co-ordination and solutions from related internal departments in TelcoX; and then delivered solutions to customers via phones and/or email systems. The third team's main responsibilities were for handling quality control of customer calls as well as customer satisfaction surveys; and the fourth team was for CSRs' training and technical support. This operation system ensured a consistently high quality service that was provided to customers.

In this stage of call centre development which lasted about six months in 2002, Supplier 1 and Supplier 2 were also involved in supplying all the IT and telecom software and hardware. They helped to install, configure and then maintain a new call centre in TelcoX by providing continuous support on system integration solutions and products selection in 2003. In this way, Supplier 1 and Supplier 2 offered innovative flexibility and reliability suited to TelcoX's call centre.

Figure 7.1 shows the new system's infrastructure. There were about 200 CSRs and nearly 200 Public Switched Telephone Networks (PSTNs) to cover the cities all over China. In order to transform to a 'customised' service model, the new system with Interactive Voice Response (IVR) function enabled more

customers. The rest of this section will explain the emergence of inter-organisational relationships.

Customer 3

Headquartered in Beijing, Customer 3 was the primary mobile communication service provider in China. It was the largest global system for mobile communications (GSM) operator with the most subscribers in the world whose network covers almost all the cities in 31 provinces and over 96 percent rural towns in China. Customer 3 also provided mobile roaming service to more than 100 million customers world-wide with the co-operation of 108 operators in 59 countries. Its great achievements and huge development potential attracted the multitudinous international investments. Customer 3 was a nation wide telecom carrier providing services to both business and individual customers in China. Therefore, Customer 3 was regarded as a major enterprise level strategic customer by TelcoX.

Customer 2

Customer 2 was one of the largest telecom enterprises in the UK and realigned during the year to provide increased customer focus and competitiveness. Its aim was to be the most successful world-wide communications group. To achieve this, they had seized many opportunities in the communications market world-wide, built their current business and focused on high growth segments. Customer 2 had extended its global operations in the year through its increasing network of joint ventures and alliances. Outside the UK, its strategy was to work with local partners. They had a number of key alliances around the world and had made a significant investment in international services. Customer 2 had offices in Hong Kong and mainland China; its headquarters was located in Shanghai. Since a huge opportunity was expected to gain the potential market of Europe by forming partnership with Customer 2, TelcoX regarded Customer 2 as a main corporate customer.

Customer 1

Customer 1 was a recognised industry leader in global Internet Protocol (IP) and data services for multinational businesses, offering network, integration and managed services to global business. Its network had unmatched seamless global reach connecting key business centres in 220 countries and territories. At the 2003 World Communication Awards competition, Customer 1 was named 'Best Global Carrier' and 'Best Managed Service'. With the main offices support in America, Europe and Asia, Customer 1 had the world's largest data network in terms of geographic coverage, spanning more than 220 countries. Building on more than 50 years of experience in data communications, Customer 1 served thousands of the world's top companies today. Customer 1, a member of the France Telecom Group, met the diverse needs of global companies with the industry's most extensive portfolio of managed data network services. It established strategic partnership with TelcoX in 2001.

Through the strategic partnership between TelcoX and Customer 1, TelcoX was awarded a contract to provide Customer 3 a wide area network (WAN) solution in 2002. TelcoX and Customer 1 had secured agreements with companies wishing to connect into China as well as China-based companies connecting globally. This contract marked the partnership's first implementation of an end-to-end international service both inside and outside China. This contract was also significant to TelcoX because it demonstrated that the company could provide a one-stop shopping solution to companies who wanted domestic and global network services.

Besides those enterprises introduced above (e.g. Customer 3, see Figure 7.2), TelcoX provided nation wide telecom resources to key sectors such as banking, finance, stock market and insurance. With those resources, companies in the key sectors were able to provide services to their customers. Figure 7.2 illustrates the external business relationships that were gradually formed with TelcoX.

Among those newly established business relationships, some international telecom carriers (e.g. Customer 1, Customer 2 see Figure 7.2) expanding their businesses in China also treated TelcoX as an important business partner, rather than simply a service provider. This was viewed as a unique co-operation different from traditional models. Hence, it provided more valuable insights into the formation and transformation of supply relationships by focusing on the relationship between TelcoX and its Western business partners.

As both headquarters of TelcoX and Customer 1 were in Beijing, links and co-operations between them were more than those between TelcoX and Customer 2. Therefore, more empirical data were available for focusing on the relationship between TelcoX and Customer 1. Thus, the cultural differences between Chinese and Western companies could be demonstrated better. Also, due to the limitation of the time and scope of this research, the study was not able to study both the business and individual users beyond the first tier; and only focused on the first tier corporate customers.

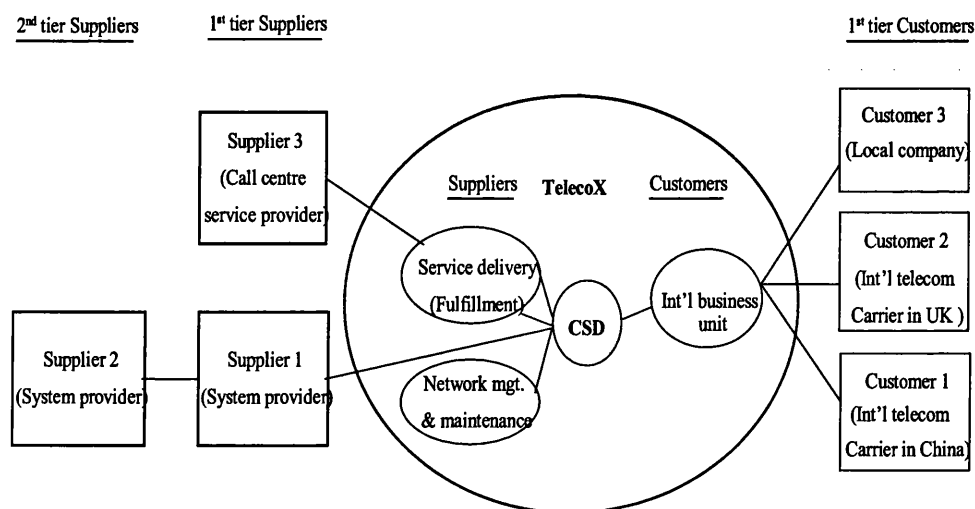


Figure 7.2: Emergence and transformation of supply relationships of TelcoX

As discussed in chapter 5, this study employs four levels of study (e.g. internal relationship, dyadic relationship, chain relationship and network relationship) to understand and examine business relationships. Therefore, the remainder of this chapter will present the relationships in different levels.

7.5 Emergence of Intra-organisational Relationship

Internal relationships

Being orientated towards close business relationships, CSD managers set up their targets and made internal standards as call centre operation guideline for improving customer services quality. TelcoX senior managers had made strategies for internal business conduct guidelines. At the same time, managers were concerned about the impacts the new system might have for re-allocating jobs and work processes. To set up a new call centre and manage the impacts, they formed a team and did a 'concrete' analysis of the current situation. In addition, the use of call centre and the needs of TelcoX's customers seemed to have determined the internal job flows and work processes.

As illustrated in Figure 7.2, the Service Delivery Department was required on the basis of many discussions on the new work process to fulfil the business requirement, through the co-operation with CSD, from the International Business Unit which took care of large accounts and telecom carriers. The Network Management and Maintenance Department was responsible for the information networks support and any technical problem.

This type of work relationship enabled communications built up in a process of co-operation in TelcoX. Employees who had clear job allocations and responsibilities built up communications that enhanced their understandings on working closely both internally and externally.

7.6 Emergence of Inter-organisational Relationship

Dyadic relationship establishment: Supplier 3 – TelcoX/CSD

Supplier 3 got in touch with TelcoX right after its founding in 1998. They started business co-operation in a small scale at the very beginning, it was not

as large as in late 2002 and the beginning of 2003. Since then, the Director of Business Development (BD) made the acquaintance of the responsible person concerned with CSD. Supplier 3 was hoping to seek more opportunities to expand their businesses from both parties.

“Thanks to the mutual interests and business needs, relationships were rapidly developed.” the BD Director of Supplier 3 said.

The Director Assistant of CSD of TelcoX had the same idea:

“We had made each other’s acquaintance before the co-operation started. This was helpful in preparing a foundation for the co-operation and to shorten the time for fitting in each other. And trust has been built up along with the developments of the co-operation drawing the two parties closer and closer.”

As a rule, after the potential customers were explored, the Marketing Department of Supplier 3 studied their customers’ requirements in an analysis of industrial market dynamics and trends. The Senior Marketing Consultant of BD explained:

“Once we got to know a corporate customer was intending to expand its business or promote its new products strategically, we tried to get in touch with them by all means. If successful, the relationship would soon be built up.”

From the viewpoint of TelcoX, Supplier 3 was a main supplier. However, from the view of a supplier, Supplier 3 treated all the customers equally. They understood that ill treatment to a small customer might cause the loss of a big order. From the view of service, all customers were very important for Supplier 3. To deal with different customers, they formed different project teams with people from different functions. Finance, manpower and equipment supports

were involved accordingly. Customer relationships were developed and maintained afterwards. The only difference was marketing strategy or the way of co-operation that should not affect their manners of service.

“We do not want to be treated unequally either.” both the Director and Senior Marketing Consultant of Supplier 3 expressed.

TelcoX also emphasised the enhancement of supplier relationships. From the view of a customer, the former Director of Project Procurement Department of TelcoX said:

“From the purchasing view, we are buyers. Traditionally, we are viewed in a special position. But, for a well-managed company, doing business with others fairly is required.”

The current Project Procurement Department Director of TelcoX said:

“Broadly speaking, from the traditional view, the adversarial attitudes we used to be typical between suppliers and buyers...but now, we say ‘win-win’; we even pay more attention to our relationships with our suppliers... TelcoX has quite good partnerships with its suppliers in China... once these relationships have been set up, we trust and get great support from each other; and then many problems will be solved...”

Therefore, the establishment of a ‘win-win’ supplier-customer relationship between TelcoX and its suppliers became more recognised. It also brought great challenges for both individuals and organisations. The image of the sales people was proved to be very important for representing the company. The information sales people provided must be updated and their knowledge enriched. The interviewees of Supplier 3 emphasised that:

“The behaviour of the sales people is the vital point in the so called ‘personal relationship’ during business relationship establishment. It [personal relationship] is different from the traditional Chinese ‘guanxi’, which is getting things done and being guided mainly by mutual interests and feelings between people.”

It can be seen that the new concept (it is termed as ‘*guan-xi platform*’ in this study) emerged and formed through continuous practices. Chapter 9 will further explain and discuss this in detail. The Director of BD of Supplier 3 remarked:

“As the development of the new concept in recent years and the enhancing consciousness of the potential market in China, the traditional Chinese ‘guanxi’ is changing gradually. Supplier 3 is popularizing the new idea among enterprises.”

Chain relationship establishment: Supplier 2- Supplier 1- TelcoX/CSD

In early 2000 Supplier 1 conducted a customer survey for TelcoX in China and then projects were set up after analysis and consultation. Between Supplier 1 and TelcoX there were ongoing business co-operations in forms of phase-by-phase, short term and long term. Supplier 1 had been playing a role of integration in the project for TelcoX’s call centre. Not only solutions were provided but also a completed project. It helped with hardware, software, application package, package information and back-up integration. It had been a business model of Supplier 1 to have consultant and integration as two main parts which customers were used to.

Supplier 2 had been one of Supplier 1’s worldwide partners since 1999 and it was the first company among many Independent Software Vendors (ISVs) to sign a contract with Supplier 1. On the other hand, Supplier 1 had been a

partner of Supplier 2 with diversified co-operations undertaking the first CRM project of Supplier 2 in China in 2000.

In terms of application, Supplier 1 used to co-operate with the first-class global package enterprises. Supplier 2 was a professional company in providing CRM solutions. As a consultant company, Supplier 2 had also been providing customers with leverage products and diversified application packages.

In the chain co-operation among Supplier 2- Supplier 1- TelcoX, the leader of Business Consultant Service Department of Supplier 1 said:

“Each party can find out where the value comes from. Apparently, the value is the key factor in maintaining the co-operation in this chain. We wish to play an active role in this chain. As to involvement in other enterprises and partners it depends on the conditions during interactions. Supplier 2 prefers to work with us - a powerful international company; on the other hand, we want to co-operate with Supplier 2, too... TelcoX, a rapidly rising company with comparatively excellent readiness in management, can meet the requirements of total market. Nevertheless, a world-class application package to support TelcoX’s business and management is beneficial. Therefore, the values of each party are vital links among the chain members promoting the development of the co-operation...”

Supplier 1 was a main business partner of Supplier 2 and its operation was all over the world. According to their business rules, the counterpart was the first partner to be chosen by each other for co-operation. Between Supplier 1 and TelcoX there was a long-term co-operation including hardware and network. Suggested by Supplier 1, Supplier 2 started co-operation with TelcoX in 2001 when the new CSS system was planned to implement in TelcoX. Supplier 1 provided customers total solutions and post-sale support with Supplier 2 as a

software provider. Regular co-operations were maintained between Supplier 2 and TelcoX.

Under the high pressures of sales targets, everyone in Supplier 2 must try their best to explore new customers, keep up and expand the relations with new and existing customers. Although TelcoX was an important customer, Supplier 2 could not pay special attention to it only and neglect any others. The Director of Sales of Supplier 2 said:

“We have to deal with different customers with different manners. These customers have differences in business styles. For example, with a high profit and long history Company B [pseudonym, a large Chinese telecom company] deals with their suppliers and customers in a very proud manner. We have to follow them and deal with them in an atmosphere of high pressure for fear that we will be shook off. Sometimes, we have to build up a business partnership with a business partner of Company B and make good use of this partnership. This is what we call a ‘trust relationship’. ‘Trust relationship’ goes beyond the normal business co-operation. While Company A [pseudonym, it merged with TelcoX in 2002] is a SOE and has undergone a renovation and reorganisation in the past few years. Thus, we can work with them in a professional way that is called ‘professional courtesy’. Among those customers, we feel much better to be with TelcoX for its different corporate culture and management style. It is easier to communicate with TelcoX’s senior managers who are from abroad. Although it is undergoing reorganisation, still previous working styles affect their business operation.”

As a customer in this chain relationship of Supplier 2- Supplier 1- TelcoX, it seems very simple for TelcoX.

"It is reasonable to have Supplier 1 as a system integrator for co-ordinating in between when dealing indirectly with 2nd or 3rd tier suppliers." the manager of CSD of TelcoX expressed.

Network relationships establishment:

Supplier 2- Supplier 1- TelcoX/CSD – Customer 1

As discussed earlier, China has a great potential for further development and promises tremendous opportunities for Western companies. The Chinese government has been opening gradually the telecom carriers market to foreign investors. There are many U.S. and European companies carrying out their businesses in China. However, even with the favorable emerging business environment, gaining a business foothold in China is not such an easy thing. Therefore, I would specially discuss about the relationship establishment with the international telecom carriers (i.e. Customer 1) expanding its business in China.

With the new system support TelcoX could provide better services to its customers while the chain supplier relationship, Supplier 2-Supplier1-TelcoX, was formed. Many customers such as Customer 1 (see Figure 7.2) had developed business partnerships with TelcoX. To expand its business in China, Customer 1 had to co-operate with local telecom companies because of a shortage of necessary resources and some limitations of existing regulations, such as a license operating in China. The co-operation with local companies would enable Customer 1 to do its business in China. Since Customer 1 emphasised services in each single process from product portfolio to any value added process, high quality of services became the base for mutual co-operation.

TelcoX was known as a reliable telecom carrier with an international standard in China, which was well managed under its senior management. Negotiations between Customer 1 and TelcoX were held in 1999 and co-operation came into

being in 2000, although there were some negotiations with other Chinese companies.

“...We also had some negotiations with other local companies first but we found that their [some Chinese SOEs] old working styles are difficult to change. Finally we decided to co-operate with TelcoX. Although it is a newly formed enterprise, a promising company with new working style. Now, it is another matter that TelcoX has become a big one after reorganisation [merged with Company A].” The Senior Project Director of Customer 1’s Beijing Office explained.

The same view on the working style of traditional Chinese SOE was held by the director of CSD in TelcoX:

“...In terms of management style, TelcoX is a newly rising enterprise. But in China, Company A is a well-known enterprise with a long history and adequate resources that TelcoX needs to borrow [even after merging]. However, the management style of Company A has not yet completely updated, bringing about some difficulties for TelcoX to work with. Some of their outdated working styles are unacceptable even for Chinese enterprises such as TelcoX, needless to say Western enterprises such as Customer 1. For example, it is always the case in Company A that some of their routine work is done at a working level with instructions from the senior managers after negotiations with other companies, which is supposed to be done only by individuals at a working level in most of Western companies. TelcoX cannot help. Customer 1 just wants to sign a contract with TelcoX without understanding the above-mentioned working style of Company A that very much affects the relations between TelcoX and Company A. In this case TelcoX could not deal on the one hand with Company A in one way and on the other hand with Customer 1 in another.”

As reviewed earlier on Chinese cultural values and their implications on SOEs (in chapter 6), the above comments indicate that the awareness of the cultural differences is particularly essential for Western companies when establishing business relationships with Chinese enterprises. Understanding Chinese culture as well as its way of doing business will provide great help to Western business partners for further co-operations and business development in China.

7.7 Concluding Remark

The changes in the CSD's job flow and TelcoX's work process and the consequences were triggered by CSS implementation. In addition, use of CSS and other information systems in TelcoX provided a new set of features. Therefore, the details of the adaptation of new customer service system in TelcoX is very critical for understanding how the e-supply relationships develop, and how the changes both enable and constrain managers' actions for forming e-supply relationships.

This chapter provides an overview of the case study on business relationships formation. How each of the organisational relationships established is described in detail. It followed the levels of study on internal relationships, dyadic relationships, chain relationships and network relationships with both suppliers and customers of TelcoX. From four different perspectives, chapter 8 to chapter 11 will provide an in-depth analysis and discuss about the process of forming and transforming e-supply relationships.

PART V FINDINGS AND DISCUSSIONS

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Chapter 8

Relationship Perspective

This chapter presents the analysis from a relationship perspective. It is divided into three sections. Section 8.1 introduces and describes the existing organisational interactions in TelcoX. Section 8.2 focuses on providing answers to how '*the 36 ji*' was used for emerging organisational interactions both within and outside TelcoX. It discusses the use of '*the 36 ji*' in exchanging process and developing their internal and external business relationships particularly thoroughly. A summary of the discussion is presented in section 8.3, which provides a concluding remark on the findings from relationship perspective.

8.1 Existing Organisational Interactions

According to the Interaction Model (Håkansson, 1982, pp. 16 - 18), the short-term exchange episodes in a relationship and the long-term aspects of that relationship which both affects and may be affected by each episode are critical to understand the interaction process between the participants that include both the characteristics of the organisations and the individuals who represent them. The earlier case description provides an overview of the emergence of intra- and inter-organisational relationships in TelcoX. In this analysis I interpret the behaviours reported in the case study using the theoretical lens described above, (i.e., '*the 36 ji*' and Structuration theory) and hence the analysis is data-driven. The selection of different stratagems to interpret the data therefore depends on the type of behaviours we identified from case study companies.

From a relationship perspective, the data analysis focuses on highlighting the Interaction Model (Håkansson, 1982) by drawing on the Chinese cultural values (*the 36 Ji*) as sensitising concepts (Walsham, 1993) to analyze the detailed work patterns in Chinese cultural contexts, to understand the dynamic

and emergence of culture, and to gain a better understanding on the interactions between human action and social structures.

TelcoX was founded by bodies that are affiliated to the Chinese government and its regional structure provided a degree of decentralization for operating units that is not common in more typical Chinese businesses as described by Redding (1984) and Whitley (1992). There were no non-Chinese staff working in this organisation, but senior managers came from various backgrounds. A few of them had experience of working in the West or in foreign enterprises. For those people, they emphasised 'ownership' and adopted Western-like professional working styles. While some of them had been working in Chinese SOEs for many years, they were used to following the typical Chinese working style, i.e. members do not exist independently, but in a network of relationships and normally conduct work activities together, although individual work tasks are differentiated (Pang et al., 1998). They emphasised on collectivism that projects a preference for group decision-making and relationships.

Thus, the daily working life in TelcoX was characterised by people with different previous working styles and 'individual preferences', which guided employees to take action from different perspectives, in different ways, and in different directions. However, as the development of business relationships in recent years and the enhancement on awareness of the potential market in China, the traditional Chinese working style is changing gradually. The old practices for building relationships from many years previously are different from that prevailing in China now. The new practices of establishing relationships emerged in some new Chinese enterprises such as TelcoX.

8.2 Emerging Organisational Interactions

Developing internal organisational interactions and '*the 36 ji*'

TelcoX's headquarters in Beijing was located in Beijing Economic Technological Development Area which was a national top-priority

development area and was approved by the Chinese central government. A number of multinational companies had also invested heavily in this area. This office location boasted of preferential policy for both national economic development area and national high technology industry park where the industrial structure was dominated by high-tech pillar industries such as IT. This industrial structure was a special one with new management systems in line and with international practices, which became an important new base for economic development in Beijing.

When entering TelcoX's office building, one could find that the office layout was similar to that of most Western companies, where more open workspace could be used by more persons, except for semi-closed offices of senior managers or executives. Employees could work and contact each other without geographical distance. In this open business environment, all the jobs could be done with both intentional and unintentional supervision. This design was quite different from traditional Chinese SOEs, where different functions or departments were located in different rooms. Leaders had their own offices. Doors of those offices implied organisational hierarchy, which seemingly created barriers or distances for communication between different working levels. This structure was also establishing an emerging cultural context for TelcoX in which to conduct its business activities.

As a variety of individual cultural backgrounds existed at TelcoX (although they were originally Chinese), there were different understandings on customer service as well as different working styles to handle customer issues during their daily work. One of the CSD managers described a situation in which he managed his business relationships. This action could be interpreted as the application of one stratagem of '*the 36 ji*' (see Table 6.1 in chapter 6):

“Besiege Kingdom Wei to rescue Kingdom Zhao (*Wei Wei Jiu Zhao*)”

“I joined TelcoX and took this job since last year [2002]. Our jobs are to handle customers' inquiries and complaints every day. Once,

we got a very serious customer complaint and almost everyone got to know that complain caused a big trouble. One of CSD members was responsible for that and finally he managed it. But he complained that the customer was too picky, utterly unreasonable...”

This particular manager felt that he had not got any chance to talk with that member although he understood it was not a very professional way to do his job. But, this manager agreed that it depended on business cases. Different managerial skills were needed for different employees, which were aimed at different problems. In general, they would like to use their words and behaviours to influence their members. This manager also gave the following description on his experiences of his feeling and behaviour during his work:

“I’d like to guide my members by my words and actions; not giving orders, not criticism, and not coaxing.... Even, sometimes, they don’t think they are in non-professional ways. The most important experience for me is to calm down and then find solutions...In other words, I try to be a professional in this field first that helps me to keep a cool head instead of being impatient or being disappointed or even getting angry. In that way, under that condition, I solved many problems.”

I interpret these actions as the application of stratagem 2: “Besiege Kingdom Wei to rescue Kingdom Zhao (*Wei Wei Jiu Zhao*)” by CSD leaders in handling their relationships with subordinates. This is analogous to Sun Tsu’s extremely vivid image that if one wants to straighten out the flue and the tying of knots in a cord, one can use one’s fingers to untie it slowly, but cannot get hold of one’s fist to thrash. To mediate the disputes, one can only talk or persuade. In this way, CSD leaders learnt how to analyse and solve problems, to discover the sources and find out solutions, as well as to overcome difficulties by themselves.

“Point at the mulberry tree but curse the locust tree (*Zhi Sang Ma Huai*)”

This highly recognised way as discussed above in TelcoX can also be interpreted as the application of the 26th stratagem which is in the fifth category in ‘*the 36 ji*’ – for gaining ground. Stratagem 26, “Point at the mulberry tree but curse the locust tree (*Zhi Sang Ma Huai*)”, is adopted suitably in managing the subordinates. It originally means that commanders should pay equal attention to benevolence and prestige when managing their troops. This idea emphasizes that a commander must care about his troop and regards them as the beloved son. It may cause troops to be willing to die in battle together with the commander.

However, it was not simply an assignment, but a tough job for CSD’s leaders to influence others in doing business in professional ways. To exercise their leadership effectively, managers needed to take actions and to lead their team members once everything had been clarified with or without their upper level managers’ support. This was seen as a necessary guidance for some employees who had been working in the traditional Chinese SOEs. They were used to relying on their higher level managers’ support (e.g. agreement, approval, etc.) for accomplishing most of their work assignments. Importantly, fulfilling working passions were considered to be the main motivation for CSD’s leaders to influence others facing to problems positively and accomplishing their tasks professionally. These actions also occurred across other departments in TelcoX. Not only did this provide opportunities for team members to add value to themselves by creating new ideas, but also influenced the traditional working styles of those employees who were uncomfortable in expressing their personal views and always sought out the group opinions.

Under the inspirational leadership, employees were able to express their personal opinions freely. Many such situations had been observed in TelcoX, in which employees came to their leaders and had a talk during or even after business hours. It was not rare to see that telephone conversations between leaders and members were made over weekends. Also, many emails were in

leaders' email in-boxes sent by their members. As employees were treated as one of the most important resources in TelcoX instead of belonging to this company, these actions in guiding employees in handling business issues were seen as well accepted. Consequently, these actions and interactions helped to create a co-operative business environment for employees, which also contributed to TelcoX's emerging corporate culture and e-relations. The following analysis will provide more details on how TelcoX's managers developed their business relationships in different situations.

**“Remove the firewood from under the cooking pot (*Fu Di Chou Xin*)” &
“The guest becomes the host (*Fan Ke Wei Zhu*)**

With the CRM idea and CSS support, the business achievements they made can be understood as leaders' utilization of stratagems of 19 and 30 for managing their business relationships. Stratagem 19, “Remove the firewood from under the cooking pot (*Fu Di Chou Xin*)”, is a psychological tactic to attack the enemy's weaknesses. It originally means that in the pot, water ebullition depends on the strength of the fire under the pot, fire however need continuous supply of wood to keep it burning at a constant temperature. In the context of TelcoX's business, it refers to anything the leaders do to interfere continuously with the day-to-day operations and interactions may win their business. The 30th stratagem, “The guest becomes the host (*Fan Ke Wei Zhu*)”, further confirmed this idea when managing their business relationships in TelcoX. Its principle is that in order to take advantage in the war, one must change the passive situation to initiative domination.

It can be seen that many of TelcoX people could manage their own work freely within their authorised limitations without asking their bosses for instructions. They also expressed that they understood what should be reported to their bosses and what should be handled by themselves and what should be done with instructions.

It is important to note that decision-making played a critical role in this change. As the Senior Manager of Accounting & Finance Department said:

“My boss always gave me a guide and left a space for me to make up. I like it very much because I think I am a responsible person. I enjoy my work and try to make it perfect.”

Figure 8.1 provides the TelcoX Leadership Model. Based on this model, TelcoX's leaders were consistently keeping their objectives and goals in their daily work. Different comments and understandings came from TelcoX's leaders on this model. With regard to 'Team Co-operation', leaders from different departments expressed their ideas from different stand points of view:

“During my working at Motorola, its advocated TCS (Total Customer Satisfaction) is to say you must satisfy your customers (downstream) with the support from your suppliers (upstream) both internally and externally. It would be a well linked chain in which everyone is able to try one's best to fulfill one's task.” [The Senior Manager of Accounting & Finance Department]

“There is no difference in my attitudes towards internal customers and external customers. I treat them equally.”[One of the senior managers in CSD]

“Communications and mutual understandings are very important in the working process. One should try one's best to fulfill his or her tasks and be responsible for that...So to put a suitable person in the right position is the right thing to do for the personnel management. This way manpower can be greatly emancipated and better results can be achieved.” [The Senior Technical Manager of Network Management Department]

“The abilities of co-ordination of CSD should be strong enough.

We have to learn to promote mutual understanding and to settle problems in different ways. Sometimes, we have to settle problems in a zigzag way. Communication is very important in promoting co-operation. First and foremost, mutual understanding should be regarded as a most important factor. Sometimes, personal feeling should be involved.” [One of the senior managers in CSD]

From the standpoint of a branch office, the Senior Manager of CSD in Guangzhou Branch Office pointed out:

“Our responsibilities form a connecting link between the preceding and the following. That means we report to headquarters and lead this branch office. We work according to the standards and overall plans set up by headquarters. We are both examined and supported by headquarters. Actually, examinations are also supports in some sense.”

The Senior Manager of CSD in Shenzhen Branch Office expressed:

“Our headquarters frequently give us instructions which are very helpful in guiding our directions of advancing. Actually we had inspirations from them instead of pressure. We are very satisfied with these relationships. We do not feel any difference between higher levels and subordinates.”

It was an agreement in TelcoX that successful team co-operation was based on supportive team members, effective communications and mutual understanding. Those were essentials to allow information-sharing, resource-leveraging, positive team working and the establishment of harmonic relationship between and across business units and departments. Two-way-support would promote co-ordination and harmony.

It can be seen that these actions taken by CSD managers led to business performance improvement. In China's telecom industry, it was reported that one of the CSD managers was awarded the title of "The Youngest Professional Manager" and TelcoX's call centre had won the title of "The National Best Call Centre" in 2003. The Director of CSD had won the award of "Best Professional Manager" in 2004. Clearly, these actions helped CSD as well as TelcoX to positively gain their advantage in this global competitive environment.

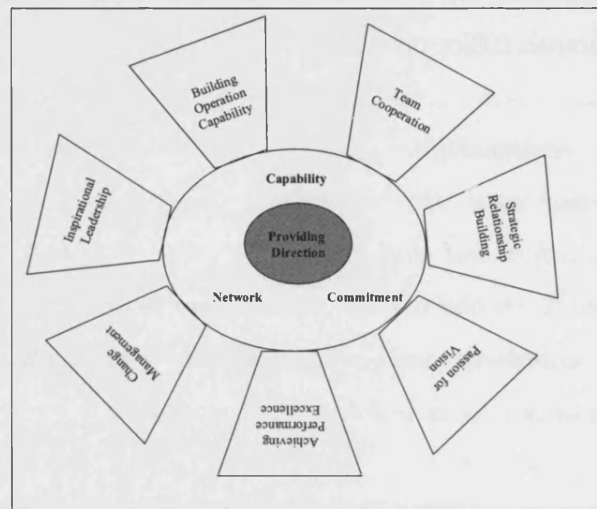


Figure 8.1: TelcoX leadership model (Source: TelcoX's internal training model)

“Watch the fires burning from across the river (*Ge An Guan Huo*)”

Although the process of a new call center design, establishment and development can be seen as the process of forming co-operative interactions within TelcoX. There were some of the actions taken by the related business units which could be understood as using the 9th stratagem in '*the 36 ji*' at the very beginning of call centre setting up. Stratagem 9 says: “Watch the fires burning from across the river (*Ge An Guan Huo*)”. This stratagem advises commanders must hold and defeat the enemy by a rapid attack at the proper time.

In preparation for designing a new call centre, CSD people were involved in customer surveys and knowledge search about how to set up a call centre. The CSD director explained:

“We cannot copy the Western countries’ designs directly. We have our own special national conditions. China is broad and there are many different dialects and customs. The economic development is imbalanced from place to place...”

Apparently, numbers of problems and issues occurred during their building work. The Director Assistant from CSD said:

“We did not have experience at very beginning and really had no any idea about the whole system. What is a call centre system? How to set up? How to allocate the jobs? What’s the work flow? ... All these are headache for us. We get some comments from others, but each says he/she is right. Later, I understand that this is not only book knowledge, or a copy of the experience of Western companies. We need to make a concrete analysis of concrete conditions of TelcoX.”

One of the team leaders of CSD added:

“We read many books and other companies’ related information about call centres, but all those are not suited to our situation. For instance, in Western countries, some customers’ inquiries are handled within 24 hours, but it will not satisfy our Chinese customers [they want feedback quicker]. We have to design our own procedures and allocate our jobs.”

The managers and team leaders had many deep discussions on their technical ability, service pattern and the characteristics of their resources. They also accumulated knowledge by keeping discussing these issues. Little by little, they

tried to fumble their ways by self-learning. After a period, they gained experience on how to solve problems. That was to analyse problems step-by-step, layer-by-layer, and piece-by-piece; and then to discover the sources and to find solutions.

Conversely, sometimes, they looked at a problem from the overview. In another word, they must understand clearly what their mission was for customer services and customer needs. Through these ways, they found out their foci. The Director Assistant of CSD noted:

“We found and understood that it takes time from quantitative change to qualitative change. We collected many detailed cases from other companies and keep brainstorming. Everybody is growing up and our team becomes mature during the process of discussion. Finally, we know what we should do and why; what we would like to do instead of we have to do.”

At the same time, they fully considered the company further developments in terms of system plan and product selection. This was critical for meeting increasing customers' demands. Finally, based on their new experience, they proposed the establishment of a call centre with a national integration distributional customer service system in TelcoX. Through this system, not only could various local customer service demands be handled, but it also had a unified workload and standardized data management functions.

In order to implement the new system CSS in TelcoX, one of the important tasks for CSD was to re-allocate jobs in a new call centre. The Director of CSD explained:

“For the call centre, business units didn't know this system very much at first, they thought customer inquiries should come to sales people directly [not business units]. But, we know it's impossible for individuals to work 7 days, 24 hours a day; we

must set up a system. Through a system, we can meet such requirements.”

The manager and team leaders said:

“At first they [business units] doubted what the call centre would be like? How can we set it up with nothing? ...From ‘sitting and watching’, through to ‘understanding’ and ‘supporting’, we have now recognized and have high expectations of our call centre.”
[manager]

“We [CSD and other business units] know that generally we have same targets and we should take co-ordinated action.” [team leader]

In the past, sometimes, CSD lost customer inquiries or problems during their handling due to non-systematic follow-ups, which was called the ‘casual way’ within TelcoX. In contrast, CSS with the functions of customer call handling, including customer inquiries, checking, fault reporting and customer complaints, and data recording, dispatching and reporting, which was called ‘manageable co-handling’, helped CSD make progresses with monitoring and co-ordinating. It was recognised as faster than before, from a day-long cycle to merely a few hours; it was agreed as a more controlled way of handling customer issues and a more managed way for data reporting. Consequently, customers found it more convenient to reach TelcoX than before. One of CSD team leaders expressed:

“...each departmental change leads to the change of entire workflow.”

From the view of internal communication, the Director of Management of Information Systems (MIS) stated:

“Whatever ‘SCM’ or ‘CRM’, the external communication [connection] is needed, but they [SCM and CRM] are out of the question if there is no suitable internal environment ...”

The Director Assistant of CSD added:

“No matter how hard the work is, how high the pressure is, my team and other team members are becoming more responsible. No matter how tough the task is, we know we’ll try our best and things should be fine...Now, we are more enthusiastic. But, more difficulties may be encountered, more changeable and harder work requires our new knowledge and skills in the near future. We’re learning and preparing to leap forward ...”

The comments above indicate that TelcoX’s senior management group was paying more attention than before to intra-organisational interactions. The following section will illustrate how TelcoX’s people develop their inter-organisational relationships.

As discussed above, CSD people worked closer with internal business units than before after CSS implementation. The establishment of these working relationships was also facilitated by leaders in TelcoX. These relationships brought benefits to both CSD and TelcoX, which also helped to form the inter-organisational relationships.

Developing external organisational interactions and ‘the 36 ji’

To extend team co-operation to the external, the Director of CSD noted:

“From a customer services point of view, CSD and its suppliers are in one team. In such a team, CSD plays a role as an inspector. Because it is necessary for us to check on the quality of services that are going to provide to customers so as to make our

customers satisfied and to meet our commitments. In such a team, we all treat each other with sincerity. To do that, effective communication is very important. First of all, we must understand our mission and responsibilities. And then, think about each other when we do our business...”

With regard to develop strategic relationship, the Director of CSD put his understanding as:

“I think a good relationship means: first of all, a kind of stable and long-term relation (because we don’t want change); second, it is expected to be integrated with TelcoX. From the view of customer services and support, the end users get the services (products) from our partners, not TelcoX. So, how to provide customers services and how about the services qualities? All these are related to TelcoX directly, they provide services in the name of TelcoX.”

“Snag the enemy by letting him off the hook (Yu Qin Gu Zong)”

In this study, it can be seen that TelcoX’s position in China’s telecom industry provided lots of opportunities to co-operate with others. To develop and maintain its relationships, leaders’ actions can be understood as the application of one of the wisdoms - stratagem 16: “Snag the enemy by letting them off the hook (Yu Qin Gu Zong)”. This wisdom holds an ancient view that one should find an appropriate method to pursue the enemy. The CSD director acted in the way showed in below:

“Sometimes, our suppliers ignore service quality due to short-term benefit. For example, how to give good quality responses to different kinds of inquiries from customers? The ‘unprofessional’ responses may lead to customer dissatisfaction, and will even damage TelcoX’ reputation. If in that case, we usually review all

these procedures with our suppliers and clear up two parties' responsibilities, and then to see if we can build a new co-operate relationship. We will continue our relationship if we both think there is something can be improved. If we found that some regulations and/or rules set up at the beginning of our co-operation cannot be followed, we need to report to senior management and suggest business units terminate this relationship."

"Befriend distant states while attacking the nearby ones (*Yuan Jiao Jin Gong*)"

Similarly, stratagem 23, "Befriend distant states while attacking the nearby ones (*Yuan Jiao Jin Gong*), also refers to a political strategy which general headquarters and even countries' highest leaders adopt. Its principle is to demoralize the enemy alliances. Here, it can be understood as the application in TelcoX to manage its peer-peer, leader-follower, supplier-customer relationships. It enhanced TelcoX's leaders' sense of responsibility and ownership, which was very important for developing and maintaining healthy business relationships in the future. These actions can also be found in Customer 1 when building relationships with TelcoX. I interpreted Customer 1's actions as drawing on the stratagem 18 that is presenting in the following section.

"Catch the ringleader to nab the bandits (*Qin Zei Qin Wang*)"

The practical observations in TelcoX, the many interviews taken, as well as the conversations made within and outside TelcoX, came to a common point in that the CEO's leadership had obtained great admiration in China's telecom industry. Employees were greatly inspired by many articles that had been issued by the CEO. Under this young CEO's leadership, his management team was encouraged to create new organisational systems, to adopt new e-technologies, to implement new information systems, to develop new business

process and to form new business strategies. With the Chinese government support to the further economic and technological development, TelcoX, a Chinese SOE, was established to tap the potentials of co-operation between Chinese and foreign enterprises' for telecom industries' development in both sides.

The chief executive officer (CEO) of TelcoX, an over forty-year-old US-educated returnee, recognised the importance of attracting good talents and other information champions with good skills and education. He granted complete authority in hiring decisions and lured top Chinese executives from Western companies such as Motorola and Microsoft. Also, lots of young people, aged around thirty years old, joined TelcoX soon after its establishment. The CEO's aim was to introduce a new model for corporate operations in China based on technological innovation and management reform. At the same time, he was aware that there were great challenges on how to manage a large Chinese company; how to take advantages offered by e-technologies and to build up a world-class company like IBM or Toyota, so that China's telecom industry would become internationally competitive. But he claimed that this would be an opportunity to make a big difference for China's information and telecom industries.

With the motivation of CEO, TelcoX had its mission and vision that directed its business. Its leadership was seen as very critical for TelcoX to develop. To exercise their leadership, managers had to find out what were the right things to do and then find out how to do those right things in the right way. They also needed to take actions and to lead their team members once everything had been clarified with or without their upper level managers' support.

As can be seen TelcoX was a well known and expanding Chinese company under the leadership of its CEO, Customer 1 selected TelcoX with high expectations and treated it as an important business partner, not only as a supplier in China. This action can be understood as the use of stratagem 18, 'Catch the ringleader to nab the bandits (*Qin Zei Qin Wang*)'. The 18th

stratagem originally meant that in the war one troop can gain some benefits by defeating their enemy. But, if they are just satisfied with small victories, they will miss the opportunity to win the big ones. This idea in the military is used to defeat enemy troops and disintegrate them thoroughly. In other words, if one wants to win a war one must capture the enemy troop's leader and destroy its headquarters. This study clearly showed that Customer 1 'captured' TelcoX's CEO and senior management for establishing relationships, which would be the first step for its big win. The Senior Project Director of Customer 1's Beijing Office explained:

"...We also had some negotiations with other local companies first but we found that their [some local companies'] old working styles were difficult to change. Finally we decided to co-operate with TelcoX. Although it is a newly formed enterprise, a promising company with a new working style under its CEO and senior management leadership..."

Using of CSS within TelcoX, employees found that more effective communications between business partners were vital for achieving their business objectives. From the standpoint of TelcoX, Customer 1 was a main customer in terms of revenue and other aspects. Whereas, as a main provider in resources in China, TelcoX was regarded as a very important business partner for Customer 1. The co-operation between these two companies was viewed as 'a unique co-operation', which is different from traditional models. That is Customer 1 not only played a role as the customer of TelcoX but was also a vital business partner. As the Senior Project Director of Customer 1 in Beijing Office said:

"Customer 1 is a company with a history of more than 50 years wishing honestly to share with TelcoX intangible assets accumulated in those years and network services covering more than 200 countries... We always share with TelcoX all our solutions in the meetings if TelcoX's performance is not good

enough ... We regard TelcoX as a team member working together and transferring knowledge. All of us do hope TelcoX will become an international standard service provider smoothly... Thus, we [Customer 1 and TelcoX] should be equal partners instead of a supplier and a customer."

Although Customer 1 operated in its own way assuming that TelcoX was also operating on the same high level as Customer 1's without knowing a lot of the behind-the-scenes working, such as the influences of traditional working style and industrial environment in China. The Director of CSD in TelcoX was impressed by this co-operative style:

"We know that our foreign business partners are more experienced and can provide much better services than us. We learn a lot from them and narrow down this gap in between. Simultaneously, we are confronted with bigger and still bigger challenges."

CSD managers also expressed:

"Customer 1 is a very important customer with very special working process and service systems that cannot well match the present systems of TelcoX ...In addition, TelcoX has many other customers other than Customer 1, although there are existing closer working relations between TelcoX and Customer 1. At the earliest stage, Customer 1 provided the most business opportunities to us. Customer 1, an experienced international telecom carrier, has shared its experiences with us. And we have learnt a lot from it." [Customer Support Manager]

"Customer 1 has been very helpful. We learnt a lot of knowledge about international telecom from it." [Call Centre Manager]

"We have been feeling lots of pressures when working with

Customer 1. But we all think those pressures are very positive and acceptable. Working with Customer 1, we have got some new ideas and learnt new experiences.” [Customer Support Manager].

8.3 Concluding Remark

Throughout the above discussions, one broad issue has been addressed: what contribution can be made to the conceptual framework of references of the business strategy doctrine on a basis of the insights gained by employing a relationship perspective to understand the formation and transformation of organisational relationships. ‘*The 36 Ji*’ has been referred to throughout the relationship perspective analysis as it is used as strategies in organisational exchanges and interactions.

By applying ‘*the 36 ji*’ to the analysis of the interactions of organisations, this chapter illustrates how ‘*the 36 ji*’ was used for emerging organisational interactions both within and outside TelcoX. It pays particular attention to the emerging interactions through the contribution of leadership to the practice of decision-making in the e-technologies enabled environment. The way of TelcoX’s managers to handle their internal relationships and the interactions of TelcoX’s employees to manage their relationships with leaders created opportunities to apply the stratagems in ‘*the 36 ji*’, which were shaping TelcoX existing cultural and technological structures.

From a relationship perspective, this chapter explains the relationships between the use of ‘*the 36 ji*’ and the formation and transformation of organisational relationships. It also explores the issue on how leaders’ decisions have positive influences for the organisation developments. The evidence from this data analysis suggests that the development of an organisation depends on appropriate strategy planning and implementation.

The applications of the stratagems in ‘*the 36 ji*’ in developing and maintaining business relationships summarized in Table 8.1 had strong influences on

TelcoX's cultural and technological structures. Chapter 9, 10 and 11 will discuss further the findings from cultural, technological and structural perspectives.

Main concepts of ' <i>the 36 ji</i> ' applied in this study	Examples of the applications of ' <i>the 36 ji</i> ' from this study
<ul style="list-style-type: none"> To mediate the disputes, a commander can only talk or persuade his subordinates 	<ul style="list-style-type: none"> To guide their members, TelcoX's leaders only used their words (not orders)
<ul style="list-style-type: none"> A commander should pay equal attention to benevolence and prestige when managing their troops 	<ul style="list-style-type: none"> TelcoX's leaders authorised their members to make decisions by themselves Employees came to their leaders freely and frequently had conversations during or even after business hours, e.g. evening and weekends
<ul style="list-style-type: none"> A commander must hold and defeat the enemy by a rapid attack at the proper time 	<ul style="list-style-type: none"> To design, establish and develop a new call center, TelcoX's leadership promoted and facilitated the formation of co-operative relationships within and outside TelcoX in different situations
<ul style="list-style-type: none"> Anything a commander does for the day-to-day interactions may gain a big win 	<ul style="list-style-type: none"> Anything a manager/leader does for the day-to-day interactions may gain a big win
<ul style="list-style-type: none"> To take advantages in the war, a commander must change the passive situation to initiative domination 	<ul style="list-style-type: none"> TelcoX had become a newly, well-organised organisation through positively gaining its advantages in this global, competitive environment.
<ul style="list-style-type: none"> A commander should find an appropriate method to pursue the enemy 	<ul style="list-style-type: none"> The development of short-term and long-term business relationships with suppliers
<ul style="list-style-type: none"> To demoralize the enemy alliances and to gain the opportunities and win the big victories, a commander should not just be satisfied with small victories 	<ul style="list-style-type: none"> Developing and maintaining the co-operative business relationships with suppliers and customers

Table 8.1 Summary of the main concepts and examples of '*the 36 ji*' applied in this study

Chapter 9

Cultural Perspective

A data analysis is presented from a cultural perspective in this chapter. It aims to highlight the existing and emerging cultural contexts of TelcoX in which the e-relationships are developed and maintained. Section 9.1 discusses the existing Chinese cultural values, in particular, the unique Chinese cultural concept of *guanxi* that provides understanding about the traditional way of doing business in China. Section 9.2 focuses on the emerging cultural context and the new practice of *guanxi-platform* in developing business relationships. The emerging corporate culture in TelcoX and the role of the emerging concept of '*guanxi-platform*' are discussed. Furthermore, the role of trust in *guanxi* and *guanxi-platform* in TelcoX is discussed. Section 9.3 summarises the data analysis from a cultural perspective in this study.

9.1 Existing Culture and *Guanxi*

From a cultural perspective, this study indicates that a fusion of traditional Chinese culture and Western management culture at TelcoX influenced e-supply relationships in various ways. In its cultural context, TelcoX marked out its distinctiveness and differentiated itself from the more typical Chinese enterprises. It more closely followed a form of the Western companies.

As discussed in chapter 6 and presented in below Table 9.1, TelcoX had a mix of traditional Chinese and Western cultures that made it different from the more typical Chinese SOEs. This unique cultural context seemed to have a positive influence on the evolution of e-relationships.

	Traditional Chinese SOE	TelcoX
Main Characteristics	<ul style="list-style-type: none"> • Work units (<i>dan wei</i>) provide employees with education, housing, medical welfare and other needs (Ding et al., 2000) • One's social status is determined by the <i>dan wei</i> to which one belongs (Linstone & Zhu, 2000) • The management system is hierarchical and constrained (Buttery & Leung, 1998) 	<ul style="list-style-type: none"> • Employees were provided with training opportunities and housing allowance • Employees were treated as one of the most important resources • Very few levels between CEO and lowest working levels. • Regional offices in main cities provide a degree of decentralization of operation unit • Use of new technologies such as CSS, other IS developed the cross-functional operation showing the structural complexity
Main Features	<ul style="list-style-type: none"> • 'Eating out of one big pot', 'Iron rice-bowl (<i>tie fan wan</i>)', 'jobs for life' and a 'cradle to grave' welfare (Lu & Perry, 1997) • <i>Guanxi</i> is fundamental in directing personal behaviour (Ahmed & Li, 1996) • The concern of 'face' (<i>mianzi</i>) makes it difficult to use rewards and punishments to motivate employees 	<ul style="list-style-type: none"> • Busy and open business environment • Company slogans were displayed in the corridor • Job changes frequently • Different departmental cultures • No formal 'reward system' yet
Leaders	<ul style="list-style-type: none"> • Unit's heads (<i>ling dao</i>) play a particular and multiple roles (e.g. approval of marriage, divorce, and birth control) (Pang et al., 1998) 	<ul style="list-style-type: none"> • No non-Chinese staff, a few of the senior managers had experience of working in the West or foreign enterprises; some managers had been working in SOEs for many years • Leaders didn't involve family matters
Members	<ul style="list-style-type: none"> • Do not exist independently and normally conduct work activities together, though individual work tasks are differentiated (Pang et al., 1998) • Individuals are uncomfortable in expressing personal views • Individuals always seek out the opinion and endorsement of the group 	<ul style="list-style-type: none"> • Individual ongoing learning and skills improvement • Close working (teamwork) both internally and externally • Individuals manage own work freely within authorized limitations without asking bosses for instructions • Formal dress code • Business language was Chinese and some English terms were mixed into it

Table 9.1: Traditional Chinese SOEs vs. TelcoX

In this new Chinese SOE, TelcoX, employees were provided with training opportunities and a housing allowance that were not of the same level as the degree of education and housing in the traditional Chinese enterprises. Everyone's existence was recognised as employees were treated as one of the most important resources in TelcoX instead of belonging to this company. Decision-making was top-down. Some of the employees, especially those who had work experience in the traditional Chinese SOEs, were used to relying on their higher level managers' support (e.g. agreement, approval, etc.) for accomplishing most of their work assignments and they were uncomfortable in expressing their personal views.

Each job description and responsibility weakened the main features of traditional Chinese 'organisational dependency' such as the 'eating out of one big pot' (*da guo fan*) and the 'iron rice-bowl' (*tie fan wan*) ensured 'jobs for life' and a 'cradle to grave' welfare for mostly industrial SOE employees. Leaders didn't involve family matters such as approval of marriage, divorce, and birth control, which was reflected in employees' internal appraisals and promotion in typical Chinese enterprises.

Also, as reviewed in chapter 6, in the Chinese cultural context, people from traditional Chinese SOEs were used to work collectively and do business in a relatively flexible way. Using 'guanxi' to develop and maintain business relationships has become a very popular way in the Chinese-based business environment.

With regard to the traditional way of building relationships, the interviewees expressed their experience on *guanxi*:

"... people usually used to establish relations simply through social activities, such as inviting people to a dinner..."

"In the past some people used to find out something in common with others then start to establish guanxi followed by money...that's why sometimes it causes corruption..."

“Guanxi attaches more importance to personal connections. They used to get things done in accordance with personal feelings, current pressures and interests without caring for final results.”

“TelcoX people are very young. There are about 200 people in the Shenzhen Branch Office with an average age of 30. We feel people are working equally and honestly. Because they did not have the experience of working in SOE, they can speak out without any hesitation if there is a necessity. Arguments for solving problems always arise among colleagues and solutions were found out without affecting personal relationships. This working relationship is different from the traditional guanxi, which always results in a low working efficiency. People used to stay dumb for fear that the personal relationship would be affected. This is very sensitive to everybody.”

Guanxi also brings about some difficulties for Western enterprises to work with.

“...We also had some negotiations with other local companies first but we found that their [some traditional companies'] old working styles were difficult to change. Finally we decided to co-operate with TelcoX. Although it is a newly formed enterprise, a promising company with new working style...” the senior project director of Customer 1's Beijing office explained.

“Working in the US, the business relationship is very simple, just business to business no more personal interests.” the Director of IT Consultant Department who had spent 12 year in U.S. commented.

Thus, there were some people who were still used to do business or establish relationships via the traditional way of *guanxi*. It cannot work in China if *guanxi* is abolished completely. It is also not suitable to apply the

foreign experience in China without considering the cultural context. Therefore, *guanxi*, a particular factor of relationship in the Chinese culture, attaches importance to personal and business relationships both in China and Western countries.

However, as with the development of international business in recent years in China, the traditional Chinese *guanxi* is also changing gradually. The old idea and practices from many years ago are different from these prevailing in China now. The new practices of establishing relationships emerged in some new Chinese enterprises such as TelcoX. An emerging new concept is forming through continuous practices in business development. Section 9.2 will further discuss and explain the emerging concept and new practices used for establishing business relationships in TelcoX.

9.2 Emerging TelcoX's Corporate Culture and E-relationships

As reviewed in chapter 6, in the traditional Chinese SOEs, ranking of job positions and titles are very important in the relationships between the upper authorities and subordinates. The working levels are required to obey the higher authorities strictly. Therefore, one is always restricted in communication in that working environment. But in TelcoX, there was an atmosphere in which people could communicate among themselves in an easy manner.

Walk into TelcoX's office, their receptionists would immediately welcome you. And then after registration, wearing a 'VISITOR' badge, TelcoX staff would accompany you all the time during your stay in this business environment. One could find that men wore different coloured shirts and ties and women were in formal dress in TelcoX. Whereas, Chinese SOEs' staff generally wear casual or business casual attire during their business hours. All the employees were wearing badges, which were not required by most of the Chinese SOEs.

Informal discussions and conversations were held among employees gathered around coffee tables located in corridors where posters with company slogans were displayed in the TelcoX's office building. Those

posters and company slogans strongly represented Chinese cultural values in co-operation, harmony and relationships, such as their so-called 'sixteen words' (see Appendix 2). The 'sixteen words' in Chinese were briefly translated into English as: Trustworthiness & Communication; Progress & Enthusiasm; Low-key & Hard working; Achievement & Commitment.

Different from Chinese SOEs, the business language was Chinese and some English business terms were mixed into it by almost everyone in TelcoX. This mixed office language was produced by employees' daily work. Employees expressed that it was easier to make sense than to translate some common English terms into Chinese during their day-to-day work. By using this special office language, employees felt that they were working in a same group through speaking a same language. This language facilitated a co-operative teamwork in TelcoX. Whereas, this kind of language was not well accepted by the traditional Chinese SOEs.

Therefore, different working styles and 'individual preferences' made it difficult for TelcoX to set up its 'Reward System'. People from traditional Chinese SOEs supported the idea of 'spiritual reward', e.g. certificate awards, commendatory letter, or being given wide publicity to other employees.

"We must be aware of and consider the different values. In China, the traditional way is to think about you are in a lower class if you mention 'money' in your work; but differently, in the western countries, in fact, this is to recognize your work by 'money'."

The Director of Supplier 3 expressed:

"We work with TelcoX in a professional way which is called 'professional courtesy' ... It is easier to communicate with the senior managers who are from abroad".

Concerning working style, differences existed in TelcoX. One of the senior managers of CSD said:

“There are some differences of working styles among colleagues especially among those who have work experience working in traditional SOEs and young generations in TelcoX. The senior colleagues consider the young people are not professional without following the old traditional regulations and rules in China’s telecom industry implemented in traditional SOEs. But I think they should change their outdated ideas to meet the new requirements of the market economy. We believe the young generations can seek a new professional way in a new era.”

The Senior Manager of the Shenzhen Branch Office of CSD expressed her feelings:

“I was not used to TelcoX’s working style at the time when I shifted to TelcoX from a SOE, where opinions and suggestions were accepted with different importance according to their ranks of staff. I dared not speak out my own opinion for fear that my opinion would be rejected. As time goes by, I have been changing my mind because all the staff is equal we feel no pressure from colleagues old or young with higher ranking or on a working level. There is a very big space in TelcoX for everybody to develop themselves.”

Over time, different departmental cultures existed within TelcoX, which contributed to TelcoX’s corporate culture that integrated subcultures into the mainstream in a harmonic way and also reproduced the new organisational structure. The directors interviewed noted that their teams had their own working styles. Therefore, it was not surprising that directors’ typical phrases were always repeated in the conversations with their team members. The former Director of Project Procurement Department said:

“... I initiated our department principles or culture; my department has my working style in the daily work... I

emphasise fairness to suppliers and ask my staff to preserve their purity; in addition, I ask myself to set a good sample to my department...”

Similarly, the concepts of ‘professionalism’ and ‘ownership’ from the Director of CSD have been rooted in his department’s day-to-day jobs. The managers from CSD said:

“I would like to try my best to handle customers’ complaints positively without any complaint, because it is my job...”

“Now, we have good teamwork among my team, among departments in TelcoX; we ‘know-how’ and accumulate experience to face difficulties; and we gain strong trust from our boss. He takes us under his wing; we’re getting confident with his great support.”

CSD team leader noted:

“Shifting one’s responsibilities on to others is not to be tolerated.”

The Senior Manager of CSD’s Guangzhou Branch Office also put forward her opinions on TelcoX’s corporate culture:

“Every company needs to set standards for itself. They have their requirements and working atmosphere. These will be imposed upon new comers, but soon everybody easily gets used to it. Those who wish to join TelcoX and accept its corporate culture will certainly get used to it.”

In this emerging corporate culture context, employees learnt how to analyse and solve problems, to discover the sources and find out solutions, as well as to overcome difficulties by themselves. Changes had been taking place frequently in TelcoX both internally and externally. Positively facing changes in this every-changing environment helped TelcoX people to keep

an ever-changing mind to the developments of both individuals and the company.

Although TelcoX staff came from different places with different experience, its corporate culture was compatible and consistent. The core of TelcoX's corporate culture was representing its development directions of culture and it was an open one incorporating things of a diverse nature. TelcoX people were working with the influences of their corporate culture and most of them agreed with their company mission (see Appendix 3) that was printed at the back of their badges and it was believed to inspire everybody greatly. Working with TelcoX's mission in mind, employees worked closely. TelcoX was evolving towards a more 'Western-style' Chinese company that was viewed as a more systematically management style. By practice, a new concept emerged for developing business relationships in this cultural context that were enabled by the application of e-technology.

With the use of CSS and other IS in TelcoX, the process management and cross-functional business units began to show a degree of differentiation that was rare in traditional Chinese SOEs (Westwood & Kirkbride, 1998). Buttery and Leung (1998) point out that Chinese country tend to be group-based economies and have a clearer hierarchical structure in their decision process whereas their Western counterparts are more individualistic and loosely organised. Their ideas support Hofstede's (1991) study in the area of collectivism versus individualism which shows that the Chinese economies ranked high on collectivism while Western economies tended to rank higher on individualism.

However, the data analysis indicates that from a cultural perspective TelcoX had a unique cultural context in which a mix of traditional Chinese and Western cultures made it different from the more typical Chinese SOEs. Everyone had one's own view and position during their daily work in TelcoX. Like the Senior Manager of Operations Department said:

"There are differences in working styles for everybody in TelcoX. These are something in common that most of us attach more importance to final results instead of methods.

So, methods adopted by different people can be compromised...”

Moreover, by delegating more jobs, leaders were able to gain more trust from team players and got more work done with employees’ positive attitudes in this process of change.

“I feel free with TelcoX’s corporate culture. We are not working under supervision in our daily work although our work will be reviewed quarterly. In fact everybody knows what he or she should do and work consciously without any supervision.” the Senior Manager of Operations Department noted.

The above comments indicate that a ‘Western-style’ had been adapted in TelcoX to conduct its business activities. But how this working style contributed to TelcoX’s emerging culture? And, how its emerging culture influenced its evolutions of e-supply relationships? The next sub-section will further analyse by presenting the emerging concept of *guanxi-platform*.

9.2.1 The emerging concept of *guanxi-platform*

As discussed earlier, *guanxi* is as a basis for understanding Chinese social and business activities. The basic rule of *guanxi* is that if one helps you, then you’ll agree to help him/her with a future matter of approximately the same magnitude. To be sincere in what you do and commit to maintain the giving and taking balance. Break from the rule (e.g. take a favor and run); it will be difficult for you to develop a strong relationship. Therefore, *guanxi* are particularistic personal social ties. Its operation basis of reciprocal obligation, gift exchanges, and honor exchanges shows respect for each other. In this study, the main actors interviewed who were involved in the processes of implementation and use of CSS indicated that the cultivation of *guanxi* at an individual or organisational level both within and between organisations was very important.

As seen more and more frequently, Western enterprises and joint ventures expanded their businesses in China and some foreigners could speak Chinese fluently, but they could not understand Chinese culture very well and sometimes made wrong decisions and judgments. The Director of Supplier 3 told an interesting story of his American boss:

“When my boss was in Singapore, he went to a Chinese school hoping to learn something about China. But actually, the teacher could not know what had happened in China in recent years. My boss was told that to establish relations with Chinese you must invite them to a dinner. Therefore, my boss always asked me whether I had invited my customers to a dinner. I felt very funny and told him that this was very old traditional practice from many years ago. That was so-called guanxi. Now, it is different. We prefer providing customers with the best solutions, resources and services to wasting time at the dinner table. It is essential for us to establish and develop the relations with customers by full support. Success achieved by customers will strengthen our relations with them. Customers’ satisfaction will help maintain the customer relationship.”

I found that the way to establish relationships was different from the traditional way of *guanxi*. It is commonly accepted that a prerequisite for *guanxi* in Chinese society is a shared *guanxi* base between two people. Traditionally such bases have been family and kinship, classmates, co-workers, superior-subordinate relations and even same surname. Making use of existing relations in one’s social ties is an important element in one’s social and business activities. In the absence of a *guanxi* base, various methods can be employed to create one. As it can be seen, a commonly used method is to use an intermediary, who knows both persons can introduce them to each other. Alternatively one can build a *guanxi* through frequent contacts and giving gifts or doing favours. Such methods can be observed in TelcoX’s business activities. However, as reviewed earlier, the concept of *guanxi* has later received some negative connotations, becoming intimately

related to corruption. A different method hence was mainly used for establishing a relationship between TelcoX and its suppliers and customers.

The above story reflects the idea of 'sensation investment' in relationship building up. From the view of long-term strategy, Chinese enterprises build up a solid foundation with potential customers in order to get hold of business opportunities which will likely emerge in the days to come. Therefore, to achieve this goal it is necessary to have various social activities and functions, through which people can make each other's acquaintance, promote mutual understandings and strengthen friendly connections.

In this research I refer to the new way of practice as '*guanxi-platform*'. *Guanxi-platform* and corruption are far from synonymous. *Guanxi-platform* placed emphasis on both business benefits and the emotional attachment (human feelings) inherent in a long-term relationship as well as the moral obligations they imply. It can have both personal and business consequences. I would portray *guanxi-platform* as moving on a continuum between a Western business relationship and a *guanxi* pole, with mixed relationships in between. Purely Western business relationships were those that focus on business interests. *Guanxi* were close relationships that emphasize more on the emotional attachment, such as those between family members and close friends. In a strong *guanxi-platform* emotional attachment is the glue.

From the data analysis, I identify that Chinese business people in developing relationships with their business partners tend to lay stress on two things. One is the relative strength of their personal relations with their business partners; this is more important on individual level. Another is a concrete moral development of the relationships with their business partners, which is more important on organisational level. Moral is here to be understood in the sense of whether the particular business partner works for the concrete benefit of the organisation.

Hence, I would define that *guanxi-platform* was '*a platform embodying value, equality and respect*'. It was invisible on both individual and

organisational levels. Differing from traditional practice of *guanxi*, the new practices are transparent of the *guanxi-platform* above board. These have ensured that the co-operation and competition among parties had ‘healthy’ relationships with others, e.g. equal opportunities and fair competition. These healthy relationships enabled parties to grow and develop; at the same time constraining development and their activities.

Table 9.2 illustrates the differences between the traditional concept of *guanxi* (see 6.1.2 in chapter 6) and the new concept of *guanxi-platform*. Although there were differences on the practices, there were also similarities.

	Main Factors	Main Characters	Main functions
<i>Guanxi</i>	<ul style="list-style-type: none"> • Trust • Favour • Dependence • Adaptation (Wong, 1998) 	<ul style="list-style-type: none"> • Implicit rules, both of obligation and reciprocity (Luo, 1997a) • ‘<i>Mianzi</i>’ (giving face) is required to enter into a business. It is a symbol representing respectability, reputation and pride (Pang et al., 1998) • The exchange of benefits, favours and information is based on trust (Yi & Ellins, 2000) • It is about building up a life-long relationship instead of about getting through one negotiation (Pye, 1986) 	<ul style="list-style-type: none"> • To give the reasons why the management system in China is hierarchical and constrained so much by cultural considerations (Buttery & Leung, 1998) • To direct social and personal behaviour in China as fundamental (Ahmed & Li, 1996)
<i>Guanxi-platform</i>	<ul style="list-style-type: none"> • Trust • Image & Behaviour • Knowledge & Capability • Uncertainty factors <ul style="list-style-type: none"> - Sensation Investment 	<ul style="list-style-type: none"> • Essential: Good product, instead of personal interests • Prerequisite: A good system management of company • Restriction: All these relationships are restricted by the laws and regulations • Operation: It is embodying value, equality and respect 	<ul style="list-style-type: none"> • To create channels for companies to communicate horizontally by classification • To provide respectable chances and conditions for companies to communicate equally with others and establish relationships • To learn others’ requirements from understanding

Table 9.2: Key elements of *guanxi* and *guanxi-platform*

Instead of personal interests or favours that were main concerns in building up *guanxi*, the directors of Customer 1 and 2 expressed their ideas in establishing *guanxi-platform*:

“...In today’s business environment, good products are essential for building up relationships [guanxi-platform] ...”

“Companies operate in a continuously perfect system which is a prerequisite of the establishment of relationships.”

However, the value of personal feelings in the traditional concept of *guanxi* was not completely denied in the new understanding of *guanxi-platform*. People held principles and flexibility were allowed only when it did not go against the principles, although all these relationships of *guanxi-platform* were restricted by the laws and regulations. That is to say personal feelings cannot be ignored in both traditional *guanxi* and new *guanxi-platform*. In this case, human relationships serve as a motivating force.

But in case if a stalemate is reached, people have to explore all possibilities to find a solution. In this situation, human relationships act as icebreakers. This situation can also be found in the relationship development in the West.

Sometimes, there were heated arguments in meetings over problems that could not be solved if one were to stick to his or her standpoint without considering others’ viewpoints. Then the problem may not be solved despite the existence of a very good human relationship. In this case the relaxation of tension was needed. If colleagues could sit and chat together in an easy atmosphere, such as in a coffee break, then somebody may be willing to consider the ideas of others. Possibilities for solving problems may appear. Here, human relationships act as lubricating oil.

To sum up, *guanxi-platform* could meet the individual’s requirements on personal relationship development. With the relationship numerous companies could be united together as well. Not only had it created chances for companies to communicate horizontally by classification (e.g. different

tiers of suppliers and customers) but also provided a respectable chance for companies' intercommunication across different industries by meeting different required criteria. The *guanxi-platform* would be kept in perfect order by increasingly interesting topics and issues, as well as searching for new requirements and the promotion of new products.

9.2.2 The role of trust in *guanxi* and *guanxi-platform*

While the concept of trust is drawn on in many studies on organisational relationships from the Western perspectives (e.g. Giddens, 1990), these studies explain that West institutional trust seems to help to stretch e-relationships across undefined spans of time-space. However, does trust help to form e-relationships with China in the global market? This study tries to highlight the differences of trust in *guanxi* and *guanxi-platform*. This section explores this issue in more detail.

In this study, interviews indicated that in the Chinese cultural context, trust is required for establishing both *guanxi* and *guanxi-platform*. There is an old Chinese saying to the effect that the bad impression of a lie can be wiped off only by good behaviour a hundred times over. Chinese people believe trust is a very important factor for building up both personal and business relationships. This is rooted in Chinese culture, which was also involved in the e-relationship formation and transformation in this study.

As it can be seen trust was an important factor affecting suppliers' selection in this study. The Director of CSD of TelcoX noted:

"...we picked out Supplier 1 by two main ways. We list down the suppliers concerned and give scores item by item then select the best ones with highest scores. This is criteria selection. Actually it is not always the only correct way to do so. Another way is to it by human relations. That means we tried to find out whether Supplier 1 is worthy of trust or not through friends."

Trust was also essential in nature in the new concept of *guanxi-platform*, which was composed of three factors that were restated by the interviewees: honesty, credit and strength. From a customer's viewpoint, directors of Customer 1 said:

"...We trust TelcoX can manage their business well in the ever-changing environments with those capable people of senior management level without relying on the traditional guanxi..."

"Trust is very important in handling the relations between teams within the company as well as those between the company and its customers... customers' trust on your company is based on their trust on you...trust can promote the business of your company..."

Thus, a good base of trust helped to build up a good company image, which in turn, ensured employees' professional behaviour and enhanced individuals' knowledge and capabilities. Those were key factors in establishing a *guanxi-platform*.

Different definitions of trust can be found in literature (e.g. Luhmann, 1979; Good, 1988; Child, 2001). However, as discussed above, trust from a Chinese cultural perspective is more about credulity and reputation that can be found in this study. With regard to types of trust, contracts (short-term), long-term strategic partners and social bonding had been identified in TelcoX. These types of trust were evident in the literature: Sako (1992, pp. 37 – 40) classified trust into three types that are contractual trust, competence trust and goodwill trust.

The employees' expressed views about the processes of implementation and use of e-technologies indicated that individuals' desire to trust relations both within and between organisations.

For TelcoX, 'trust' means:

"Whether you can delegate your work to others, give others a free hand in their work, or whether they can ask you to do their work."

"Whether I can loosen up on the control rules after close observation..."

This means that trust is based on positive expectation that the person will perform. This understanding responded to Sako's (1992, p. 39) "goodwill trust". As discussed earlier, *guanxi* plays a very important role in a business relationship building up in China. However, many foreign companies conduct business based on market situations without too much consideration of the human feelings involved in a *guanxi*. They tend to be contented with the signed contracts while the Chinese look beyond the contract for sincere commitment as in a good *guanxi*. This does not mean that the Chinese will not abide by the signed contract without a *guanxi*. It denotes the general tendency of Chinese people to do business with a long-term orientation. With a good *guanxi*, foreign company can rely on its Chinese partner to find a better solution when unexpected circumstances occur. In many cases, one can be better off with goodwill and friendship than one can be with a signed contract.

Regarding "contractual trust", it means that this type of trust is reinforced by government regulations. Sako (1992, p. 37) notes: "any business transaction relies on 'contractual trust' for its successful execution. In particular, suppliers normally agree to produce and deliver ordered goods on the basis of written (or in some cases orally communicated) orders, in the expectation that they will be paid for work done within an agreed period of time after delivery." However, as discussed in chapter 6, there were some limitations in China's telecom and commercial laws. Also, as discussed above, many cases involving traditional *guanxi* to establish business relationships; they were lack contractual trust from the Western perspectives. Contractual trust may exist in the mutual expectation that specific written or oral agreements will be kept (Sako, 1992).

Traditionally, a well-established *guanxi*, however, can go beyond business facilitation. As a supplier, a good *guanxi* means that you can stay on the value chain of a customer as long as you do not break the *guanxi* even if you have competition from other suppliers. As a buyer, an old customer can get better terms of payment or take delivery of goods on credit, all of which would be impossible without maintaining a good *guanxi*. In today's business environment, with the transformation of the Chinese economy, the development of China's regulations and laws, the process of reform as well as emerging cultural norms such as the emergence of *guanxi-platform* has facilitated an increased contractual trust establishment. As above, comments from TelcoX and its business partner, on whether a trading partner was worthy of trust, relied on its reputation before entering into a new relationship and partly through the experience that was to see if the original expectation was fulfilled.

Since "competence trust" concerns the confidence on a trading partner to carry out a specific task and to perform its role competently (Sako, 1992, p. 38), normally in an outsourcing-relationship competence trust may have less control. However, the outsourcing-relationship between TelcoX and Supplier 3 didn't seem to have less control on competence trust. It can be seen that Supplier 3 being a typical enterprise-oriented organisation focused on individual competence and organisation effectiveness. Trust relationship did not come from emotional support but from TelcoX's high density of evaluation. This was largely due to formation of different project teams in Supplier 3. Members in Supplier 3 were highly involved in task completion and *guanxi* showed little effects on trust. Here, it is important to note that the convention of inspecting was an increasing trend in TelcoX as well as its' business partners. In this case, *guanxi-platform* made it possible for TelcoX to inspect call centre outsourcing services provided by suppliers in order to ascertain whether they met the stipulated quality standards or not.

As mentioned above, "goodwill trust" refers to mutual expectations of the willingness to do more than is formally required (Sako, 1992, p. 39). Through *guanxi-platform*, this seemed the best way to provide service to end users. For example, goodwill trust in the relationship between TelcoX and Customer 1 was the expectation that both of trading parties were

committed to taking initiatives to exploit new opportunities over and above what was explicitly promised by establishing *guanxi-platform*. The point here is that both TelcoX and its business partners were seeking opportunities to offer their strengths when building up their *guanxi-platform*.

In response to developing and maintaining a relationship of trust in establishing *guanxi-platform*, this case provided the following ideas to support the arguments, which is 'long-term close trading relationships with a few selected suppliers, based on trust' (i.e. Obligational Contractual Relation) has replaced 'multiple sourcing from several suppliers on short-term contracts' (i.e. Arm's-length Contractual Relation) ...' (Sako, 1992):

"It is always the case that many customers asked for assistance simultaneously. But it is impossible for us to turn up to discuss with them at the same time. We still try our best to make full use of our resources and support for them beyond their expectations. Thus, a trust relationship is formed...we come to realize that trust is not only one-way traffic system, but also beneficial to both sides..." [The Director of Supplier 3]

"I have no objection if you say that trust is very important in business co-operation. Trust cannot be established at a working level or a senior management level without the qualified technical support that exists in any project like CRM. In face of the huge challenge many project managers and executives must try their best to meet the needs of clients."
[The Senior Manager of Supplier 2]

As shown in the Appendix 2, Western trust seemed to be considered as well in this study. It emphasised work capability and outcomes through performance, rather than an expectation. The Director of Customer 1 expressed:

“Personal working style and ability are also very important for building trust relations...”

“Trustworthy & Communicative” was one of TelcoX’s slogans that represented TelcoX’s corporate culture and guided their businesses; it also required employees’ actions to reach their targets. Since all the services and support provided were building up TelcoX’s reputation, co-operation with customers and suppliers was considered to be based on mutual trust.

“We work closer than before and we need more trust between each other. We cannot progress without ‘trust’ [one of the CSD managers]

Sincerity in communication, trueness in information provision and good organisational reputation were important aspects of building and maintaining trust relations. Those were especially relevant in this case of e-relationships formation and transformation.

9.3 Concluding Remark

From a cultural perspective, the cross-cultural working and its relationships that were enabled by the use of e-technologies in TelcoX present the dynamic and emergent nature of cultural structure. Ideas and behaviours that become embedded in TelcoX’s corporate culture originate from an individual, a group or a department. In TelcoX’s corporate culture, these ideas and behaviour seem to be associated with its senior management group. The senior managers in this young company developed and attempted to implement its company philosophy that was guiding individuals in their business behaviours. Over a period of time, a corporate culture emerges with the company philosophy implementing and TelcoX people are experienced.

It was in fact an obstacle for the establishment of *guanxi* in TelcoX, people just said what they wanted to say without any hesitation or worrying about offending their bosses or upsetting others. They could express their ideas freely even those that were still under consideration. A fusion of the

traditional Chinese and Western management cultural context helped *guanxi-platform* increasingly developed in TelcoX. However, to ensure the obligations were met between parties, legal sanctions were required to achieve their objectives in developing and maintaining those relationships.

Understanding the differences in doing business between China and the Western countries can help foreigners gain perspectives on the importance of Chinese cultural norms, such as *guanxi* and *guanxi-platform* in its cultural context. The role of *guanxi-platform* in the e-relationships formation and transformation will help Westerners adapt to and accommodate the differences in handling Chinese-based businesses.

Having recognised the vast market opportunities created by China's recent receptivity to foreign corporate investors, it would be desirable for Western countries to cultivate the Chinese *guanxi-platform*, which is to be critical for the success for Western companies in this dynamic business environment.

Chapter 10

Technological Perspective

An analysis of the case study is presented from a technological perspective in this chapter. It consists of three sections. Section 10.1 reviews and discusses the existing call centre and technology in China. Section 10.2 focuses on the emerging call centre in TelcoX and e-technology-in-use. It also discusses the interplay of e-technology-in-use and organisational interactions. A concluding remark is provided in section 10.3, which summaries this analysis by emphasizing the role of e-technology in formation and transformation of e-relationships in Chinese based business environment.

10.1 Existing Call Centre and Technology-in-use

As reviewed in chapter 6, the evolution of the call centre in Western countries greatly influenced China's call centre industry development in the late 1990s. According to Frost & Sullivan & CTI (China's Call Centre Development Report 2002), before 1998, China's call centre industry was mainly focused on only some of the service fields of telecom, such as "114" telephone number querying, paging centres, and so on. After 1998, with the accelerated development of telecom in China, the call centre industry has been introduced in China. During 1998-2000, China's call centre industry stepped into a leap-developing stage. It has a strong development tendency and has been accepted by more and more Chinese enterprises and users over the past three years. Call centres have been largely used to provide various services in other fields, such as banking, the insurance industry, governments, law, the computer industry, as well as many other industries. Call centres are an integral part of most industries today.

From an industry point of view, the main factors promoting the development of the call centre industry are fast growth of telecom market and the improvement of services driven by the competition. In addition,

China's WTO accession not only weakens the local protection policy, but also forces Chinese enterprises to join the international competition (China's Call Centre Development Report 2002). It is clear that the enhancement of competition, faster growth of the Chinese economy, and the quality of services will continue to promote the development of the international market in the near future.

Call centres possess the high touch of personal sales or service, while having the high-tech necessary in this competitive environment. Well-managed call centres exhibit many desirable features that complement a company's strategic market focus and tactical plans for reaching a target audience (Prabhaker et al., 1997). Whilst there are some factors inhibiting China's call centre progress, e.g. high expense of call centre set up and operations, low awareness for services, lag of operations management, short of the encouragement policy and system, and big personnel flow and short of senior talent persons (China's Call Centre Development Report 2002)

Therefore, young Chinese enterprises like TelcoX made an enormous effort in enhancing the service consciousness, improving service quality and providing outstanding services in order to explore the new Chinese generation of telecom corporate management and the development of the competition pattern. Their efforts fulfilled the mission of the SOEs' reforms as well as the knowledge and technological innovations.

10.2 Emerging Call Centre in TelcoX and E-technology-in-use

Since its establishment in late 1999, TelcoX's notable innovations and experience in telecom and services industries created a historical miracle in China. TelcoX was highly recognised after its unremitting endeavour on service quality improvements and business development over three years. The processes of call centre design and development was a good example for sharing TelcoX's experience on providing high-quality service and advanced call centre management. TelcoX's call centre was providing '7 x 24' (7 days a week, 24 hours a day) 'one-stop' service, which was awarded as "The National Best Call Centre" in 2003.

As shown in Figure 10.1, this call centre worked as a central unified management of TelcoX with a series of branch-centres operating separately in different locations, such as major cities like Shanghai, Guangzhou, Shenzhen, Jinan, Tianjin and Hebei etc (see Figure 10.1). They were mutually connected by “PBX remote modules” through “PBX” in Beijing Headquarters. Similarly, there were many sub-centres operating under each of the above mentioned branch-centres through “1003 junction points” as illustrated in Figure 10.1. A total of more than 30 branch-centres and sub-centres were working under its call centre operation guidelines. They worked in a network. Its customer service system made real-time contacts with the overall business system. For instance, a sub-centre could usually handle a coming in call itself. But when this sub-centre was busy, the coming in call could be automatically referred to and handled by other sub-centre which was not in busy at that moment through “1003 junction point” or to branch-centre through “PBX remote module”. This system was regarded as a unique system with the functions of call auto-balance, call auto-assignment and auto-resource allocation.

Moreover, with the advantages of this system, such as data analyse, processing and reporting, TelcoX could set up their targets and make service standards for customers. Actually, it was a way to conduct and follow market research. In this way, TelcoX enhanced their service quality. This unique call centre infrastructure and operation style contributed to the growth of TelcoX, especially, as it had overcome the epidemic of SARS (Severe Acute Respiratory Syndrome) in 2002. This empirical evidence proved Rappaport’s (1996) statement that a call centre’s mission is defined and reflects the company’s sales and service strategies; achieving world-class call centre means integration – among technology components, and between the technology and business/operational process.

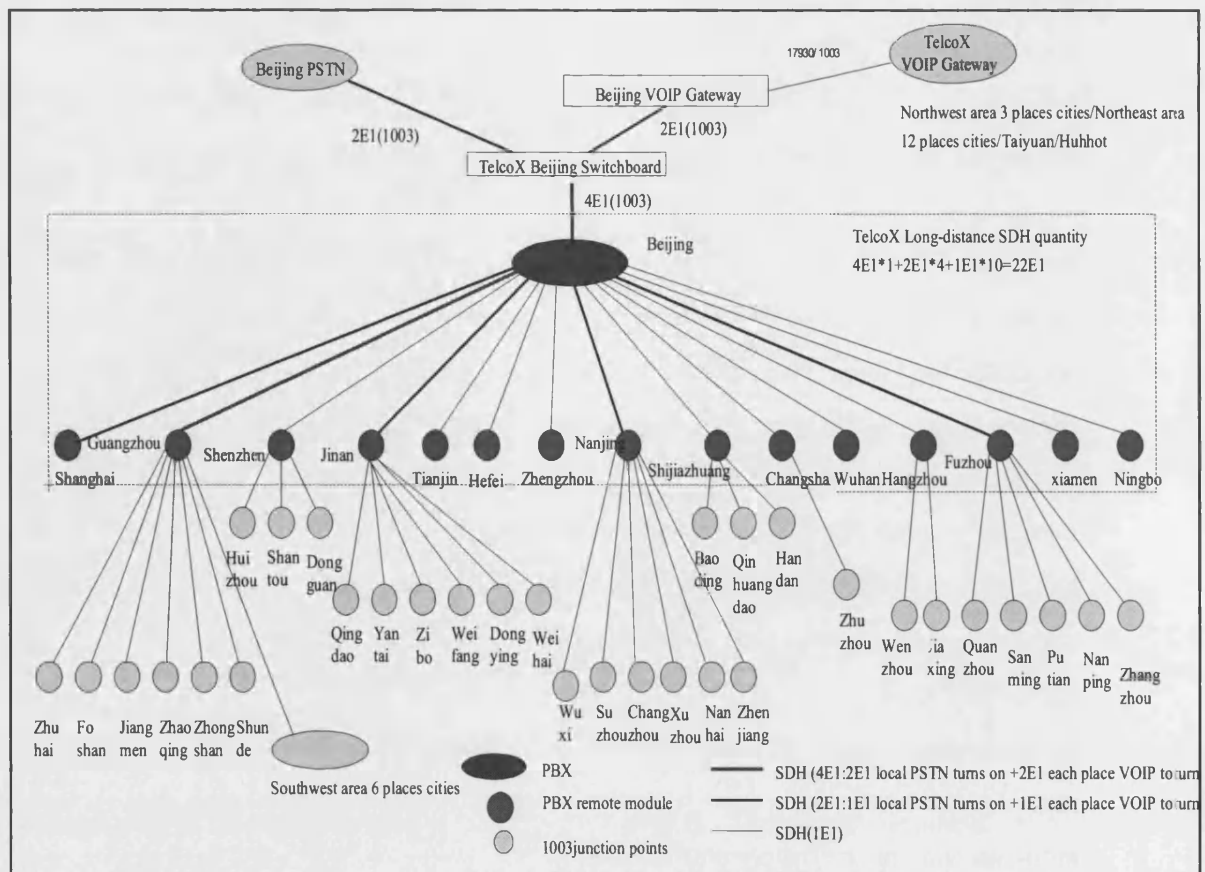


Figure 10.1: TelcoX's call centre in China

As introduced in chapter 7, to gain a competitive advantage by the use of its call centre, TelcoX outsourced the service of first line CSRs to Supplier 3 in 2001. According to Frost & Sullivan & CTI (China's Call Centre Development Report 2002), before 1998, people involved in commercial call centres just did not have enough ideas and consciousness in service. The outsourcing of call centres was very rare. Along with some experienced international famous call centre companies expanding their businesses in the Chinese market, the outsourced call centres have been established. For example, Supplier 3 was reported as a pioneer provider in China's call centre outsourcing services. By the end of 2002, the number of Chinese call centre service providers for outsourcing was about 43 (China's Call Centre Development Report 2002).

Call centres have transcended their traditional role as efficient telemarketing vehicles and offer advanced features to ensure quick responses that enabled companies to build a comprehensive knowledge base of its customers

(Rappaport, 1996). TelcoX used its call centre in many ways, such as IP telephone, fax or mail, for communicating, improving customer services, exploring new customers and establishing new business relationships. With regard to the data management, the Senior Manager of the Finance & Accounting Department said:

"We frequently have communications with CSD, which is one of our internal customers. Call centres can get customers' data provided by us through our own system."

Good customer data analysis and management helped TelcoX to achieve high customer satisfaction and to open up the further business opportunities. There is evidence to suggest that retained customers are more profitable than new customers (Christopher, 1992, p. 33). The Director of CSD, TelcoX expressed his own opinion on the use of call centre:

"... We explored a new account with efforts four or five times more than providing the new services for an existing customer... The most important thing for maintaining customer relations is to find out what customers' requirements are. And this can be fulfilled through call centre by analyzing the customer calls... Call centres and CSD are also channels for providing pre- and post- sale services, follow up calls, collecting information and discovering new businesses opportunities and so on."

TelcoX was forced to re-examine and redefine its marketplace after building up and the use of its call centre. They realised that call centres were far more than marketing tools. To make it a profit centre, the need for a CRM strategy and new knowledge and skills in managing a call centre had never been greater for CSD leaders. This need created another co-operation opportunity for TelcoX and Supplier 3.

"We (call centre) leaders also participate in Supplier 3's trainings on call centre management and some marketing

related practices. Some of us also have obtained various certificates.” One of the senior managers of CSD said.

It also shows how leadership was used to create benefit through call centres; how leadership helped the implementation of CRM systems; and how they used the CRM strategy to manage their customer relationships. In turn, these company developments helped TelcoX’s leaders to achieve their own goals. The remaining two sub-sections of this chapter will discuss in detail how managerial actions interacted with the ‘e-technology-in-use’ and then reproduced existing or produced emerging technological structure (e.g. CSS-in-use) within and outside TelcoX.

10.2.1 Interplay of e-technology-in-use and managerial actions

As discussed earlier, the implementation of the newer type of e-technologies created new technological tools and features that ensured TelcoX to provide better customer services and support and to build up a better company image. Use of CSS and other information systems in TelcoX helped establish new forms of business relationships, which were enabled by the application of e-technologies and were regarded as e-relationships.

As known in TelcoX, one of the most important decisions on TelcoX’s technological strategy was ERP implementation. There were only a handful of companies in China using ERP systems, although China has achieved impressive economic growth in recent years and it is undergoing a technological change with huge IT investments in both public and private sectors (Huang & Palvia, 2001). In China, there were several popular views of ERP implementation. Most companies were first users and perceive a lack of expertise. They think it is difficult but unavoidable. While some others did not have a very successful experience with ERP and did not see many benefits. The common belief is that ERP systems are only for larger companies because of the high costs of acquisition, implementation and maintenance. As a result, service and support are rudimentary. In addition, a general perception is that there is a high ERP implementation failure rate.

Differently, the Director of MIS department of TelcoX was impressed by CEO's decision. He said:

"It depends on one company's determination actually. It heavily depends on whether the leaders want to solve their management problems or not. In TelcoX, at first, our CEO and VP decided to set up ERP. Then, things were getting easier with their support. Although they're not ERP experts, they know ERP will enable internal system effectively and will solve our management problems. They made the decision and then I took actions for implementation."

Based on the ERP model (see Figure 10.2), the Director of MIS Department explained that their main focus was in the management level. All sub-systems, including HR (Human Resource), KM (Knowledge Management), Workflow, Business Management, Storage and Security systems, were implemented in one year. With the ERP implementation and changes on internal business process, TelcoX got more control over its management. It also appeared that TelcoX's business operations heavily relied on good teamwork with internal departments and external partners. From the viewpoint of purchasing, the Directors of MIS Department identified differences between the previous systems and new systems:

"Obviously, to select a supplier and place a purchasing order is decided by people in previous systems. However, we have to follow the new systems procedure; all approvals are done by systems, not by people, not by personal relationships..."

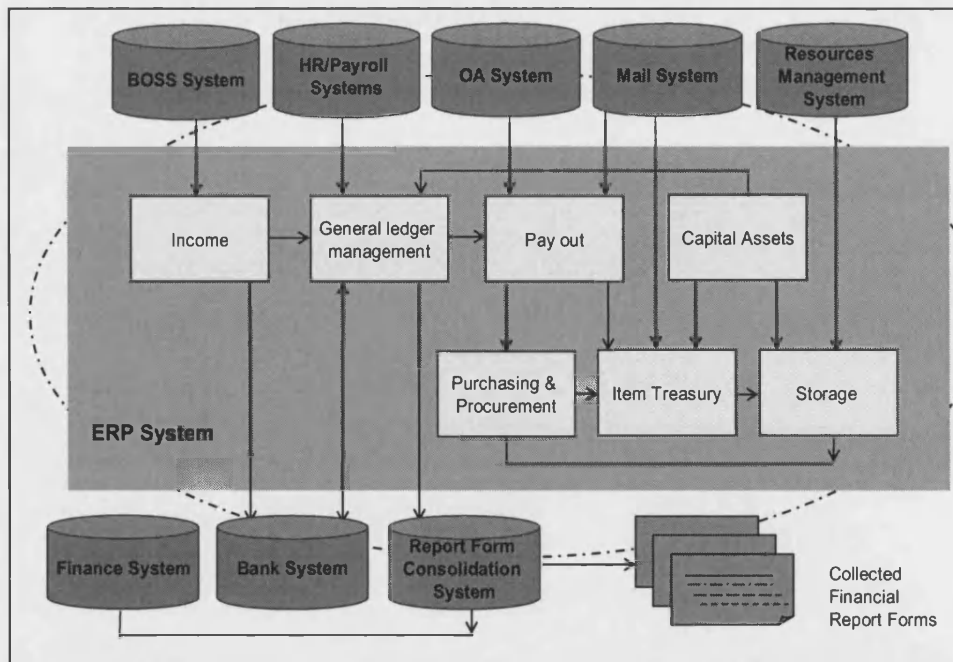


Figure 10.2: TelcoX ERP System (Source: TelcoX internal document)

In practice, everybody was expected to systematically follow processes that were set up before new systems implementation. Operating through these standardised systems, new management skills were required and paying more attention to business commitments was needed. However, it needs a longer time. Some difficulties and problems existed in process control that aimed at building and maintaining formal business relations over time. CSD senior managers expressed their opinions:

"We deal with almost all departments of TelcoX. Sometimes, I feel very upset that some people with different standing points cannot follow the regulations and rules. Bringing in something of personal understanding into their businesses, they may put forward their opinions and ideas with some factors which are nothing to do with their jobs. This is not helpful to solve the problems in business. On the contrary, this will create many difficulties for solving the problems and will be harmful to the working relationships instead."

"There are some people who are not very responsible in their jobs. In order to avoid being held for responsible, they do not

want to express themselves with a clear-cut attitude...At this time, if we bravely take the responsibility to make decisions and carry them on to a success, they can understand our good will. Thus, the mutual co-operation with understanding and respects between us can be established.”

“I think that the purpose for us to apply a systematic process in solving problems is to limit the unprofessional practices.”

“I think that management means a guide for business or business is managed under guidance. Therefore, the mutual understanding between managers and the managed is very important.”

The Senior Manager of Accounting & Finance Department said:

“Reasonable work flow can only be made by professionals of different processes. Only the reasonable workflow can be maintained. Working relationships will be affected if the process can not run smoothly.”

Whilst there were some ideas that managers were failed to take into account or to execute in TelcoX. The Director of Audit Department (former Director of Project Procurement) told his personal experience:

“When I was the Director of Procurement, I suggested a system called CMS, Contract Management System. The purpose of it is to record and to analyze reports that can be retrieved from those records (data). The long-term contracts (with suppliers) should be recorded in this system. This is from my original idea about e-purchasing, an on line procurement system. All detailed items will be defined, such as product item, unit price, quantity, delivery time and location, confirmation, etc...But, this assignment had been transferred to my replacement after I got my new assignment. Finally, this

idea (implementation) failed to be put on schedule due to many reasons.”

Thus, leaders' capabilities for solving problems were positive factors in good communications. Since changes had been taking place quite frequently in TelcoX, effective co-ordination among senior managers was helpful to promote their communications and working relations. Those would facilitate TelcoX to manage change. As a matter of fact, everything was changing in TelcoX both internally and externally. Therefore, TelcoX people even say they could not stay in their same work places/positions longer than three months. One of the senior managers of CSD described his first experience about the change in TelcoX:

“I experienced the first change in my department on the first day I joined TelcoX. To tell you the truth, I had got some feeling about that change before I started working, still I could not get used to it. It was the same case with others. But I think it takes time for everybody to get used to it.”

The Senior Manager of Operations Department noted:

“Regarding changes I think we should realize that changes are unavoidable. We should approach them with positive attitudes. As the Chinese always say, things have both positive and negative sides. There is an old Chinese saying that a loss may turn out to be a gain. We should promote the positive or get used to the changes.”

Although working in such a changing environment, not many people would like to leave TelcoX or quit their jobs. The reasons why they could work for TelcoX for long time were:

“Everybody is confident with TelcoX and the young people feel they have very bright future. It is something different from those traditional SOEs.”

“They [employees] prefer to remain in TelcoX to enrich their knowledge, improve their skills and accumulate their experience if there is no better chance to do that for them in other companies.”

The positive attitudes to confront difficulties and the high expectation of employees brought leaders full confidence for TelcoX’s further development. The Director of IT Consultant Department said:

“When I was in the US, many Chinese people worked in US IT companies. They are very smart and diligent. There is no big difference between the US and China...China has been developing rapidly, especially in this decade. We are catching up with Western countries advanced knowledge and technologies just in these last few years. The modern youth ‘gobble up’ the new ideas which have been accumulated for decades in the West.”

Therefore, TelcoX’s leaders created more opportunities for employees to make decisions by themselves when doing their individual jobs. Along with the development of TelcoX, effective communications and closer working relationships between and across departments had been established. The following subsection offers a detailed explanation on the interplay of e-technology-in-use and organisational interactions.

10.2.2 Interplay of e-technology-in-use and organisational interactions

In China, under the teachings of Confucius, traditional Chinese SOEs were influenced by Chinese cultural values on organisational and managerial practices, such as people management. It is said that Chinese management is more relationship or people-oriented as opposed to performance-oriented (Lockett, 1988). One of the key characteristics was that all the management rules were made by people not by systems. However, e-technology-in-use had led to TelcoX’s work process changing. To manage the impact of work process changes, effective communications were regarded as essential in

their day-to-day co-operations. As discussed in chapter 8, the prerequisite for better co-operations were perceived as mutual understanding and trust.

Differing from the traditional ones, e-relationships were focusing on the digital economy, because the emerging e-technologies enabled parties in a long-term business relationship to maintain constant communications and effective interactions. Therefore, e-technologies-in-use caused a shock to the previous management model and business process. In other words, Chinese enterprises needed to be transformed gradually to systematic management via use of e-technologies from people management. As the Director of MIS Department of TelcoX said:

“Because the more scientific management model [use of IS in their business management] is being adopted in our company, more people power is to be divested. Therefore, our main concern should be on how to improve our management. The improvement in management is to shake up the whole previous management system...This is a big difference from the previous one. Another difference is all approvals by system, not by people, not by personal relationships...”

However, as discussed in chapter 8, the emotional components in both *guanxi* and *guanxi-platform* were still important elements for an individual as well as an organisation in developing relationships in the Chinese-based business environment. Humanity had been identified as an important value of a good-natured person. The emerging interaction patterns with multiple channels enabled new forms of e-relationships, shaping the new technological structure within and outside TelcoX.

From a system view, a unified language for communications was seen as extremely critical. From a human view, communication and information flows took a variety of forms, which had different effects around TelcoX. Employees influenced and were influenced by these emerging organisational structures. People who tried to avoid misunderstandings relied on traditional ways like face-to-face contacts and memos. However,

people preferred the advantages of the technologies frequently used email, Intranet and Internet systems. There was some feedbacks from employees:

“We usually communicate by email system. Although face-to-face communication is a good form with a better result than phone calls, it occupies much of others’ time...TelcoX advocates non-paper business work. Email is a good means for intercommunications.” [Director of Operations Department]

“There are many ways of communications. Email is good for sending messages to many people simultaneously, especially for those emails with attachments. Email can also serve as a record. But I prefer telephone to email because talking via telephone can express my feelings and attitude fully, thus making a much better understanding. Of course, sometimes it is the case I do not want to speak to somebody face to face. I will make use of the telephone instead. As a whole, all kinds of ITs can help better communications.” [The Senior Manager of Accounting & Finance Department]

Also, as an ERP system was used as the core of the IS in TelcoX. The interplay between e-technology-in-use and organisational interactions provided insights into the understanding of transformation of organisational interactions. Concerning the use of e-technologies for development of business relationships, the Director of CSD said:

“Both of us [suppliers and customers] share the same view that e- technologies will be very helpful for both sides in co-operations in the near future...”

Therefore, the use of e-technology also created more opportunities for TelcoX to work with its business partners. Since Customer 1 was a very systematic company in terms of use of technologies for management, they wished to share its knowledge and skills with local companies like TelcoX. Customer 1 had a Global Customer Service Centre (GCSC) that was

different from a call centre. With its network access, GCSC had its visibility, first and second level supports as well as trouble shooting functions. It could go further to other systems if necessary. Customer 1 hoped TelcoX would be beneficial from that and become a long term partner with which Customer 1 could expand its business in China. However, the lagging behind in system support affected the co-operation between Customer 1 and TelcoX. But they understood that it needed time for TelcoX to change their ideas and improve their support and resources. These ideas also got the agreement of TelcoX people.

Customer 1 also hoped TelcoX could understand what Customer 1 was driving at, transferring its knowledge it shared with TelcoX into something practical during co-operations in the past few years. The interviewees expressed that Customer 1's people were very happy to notice that TelcoX had adopted some ideas and tools introduced by Customer 1 during their co-operations. People from Customer 1 and TelcoX tried hard to overcome many local difficulties in different provinces and autonomous regions. There was no easy job, but fortunately, TelcoX had started. The Director of Customer 1 expressed her feelings on working with TelcoX:

“Customer 1 has customised systems and tools for communications with its customers and suppliers, including e-procurement. All these systems and tools are linked together for end-to-end supporting without manual operations in the main process...Some of the local companies want to introduce advanced experience and adopt newer ITs from abroad. They spent a lot of money to buy advanced technologies without knowing how to use them, just like hitting a mosquito with a big gun. The whole system can work in foreign companies only when all the systems are properly linked together. One or two pieces of systems can do nothing for the whole process, not to mention solving the problems. Actually, it is a matter of adopting a completely new idea first rather than a system. This is a systems engineering composing both the new idea and the necessary technical skills. It cannot work if one is omitted. But at the

present stage, it is not a common understanding in China. Some people failed to follow you if you talk to them on this issue; and some people do not know really what you meant. It seems that it takes time for them to experience a process of accumulating new knowledge and skills. It is not realistic to deliberately impose upon them with a new idea. This is also my experience from working with TelcoX. That is why I think it has a long way to go for the local companies.”

The above comments implied that organisational co-operation was increasingly becoming a driving force for using e-technologies in maintaining these e-relationships.

10.3 Concluding Remark

From a technological perspective, the data analysis illustrates that the leverage of the advances of e-technologies significantly improved TelcoX's service quality and customer satisfaction, enabled it to gain competitive advantages in a service business, promoted its business relationships development and helped it to create strategies for entering global markets. At the same time, rapid developments were taking place in call centre technology, requiring TelcoX's critical decisions in the selection of the best solutions.

Moreover, it provides insight into the role of e-technology in formation and transformation of e-relationships in Chinese-based business environment. To survive and develop in this global competitive environment, organisations must realise the importance of the technological advantages and the roles they will play in facilitating changes. This transformation, which was accelerated and supported by applications of new technologies, facilitated business process redesign, enabled a better understanding of customers and new methods of communications within and between organisations.

Despite the fact that e-technology enabled business relationships are practiced widely by many organisations there is little discussion in the literature. A characteristic of e-relationship and networked organisations as well as new ways of interactions, are needed.

Chapter 11

Structurational Perspective

Findings from a structurational perspective analysis are presented in this chapter. Structuration Theory is used as a meta theory to illustrate how data analysis from a relationship perspective, a cultural perspective and a technological perspective are linked together. Section 11.1 discusses the dynamics of interactions. This section discusses from a relationship perspective how organisational members interacted with their environment and among themselves. Section 11.2 focuses on the dynamics of culture. From a cultural perspective, a comparative analysis on *guanxi*, *guanxi-platform* and Westernised business relationships is provided in this section. It aims to illustrate the emergent nature of culture. From a technological perspective, section 11.3 examines an analysis on the dynamics of e-technology-in-use. Structuring of e-supply relationships is presented in section 11.4. This section provides a synthesised framework on e-supply relationships in the network context. A summary of data analysis is provided from a structurational perspective in section 11.5.

11.1 Relationship Perspective – Dynamics of Interactions

From a relationship perspective, the Interaction Model (Håkansson, 1982) emphasises that the environment (wider context) must be considered when analysing the interaction between a buying and a selling firm (IMP, 1997), p. 13). In the study of TelcoX, employees reflexively monitored their environment and acted accordingly. As seen, China's telecom market increasingly consists of different types of organisations, e.g. Chinese SOEs, joint ventures, multinational companies. They become important actors in this environment that is comprised of national resources, investments, increased economies of scale and developments of ICTs. Thus, strategies of gaining distinctive competences are critical organisational responses to the environment. As described and reviewed earlier, in order to achieve a high level performance, TelcoX's leaders decided to implement IS, such as ERP

and CSS, as their first step of strategy executions.

To execute the CRM strategy, CSD people explored their surroundings and engaged in directed and undirected searches at the early stage of a new call centre establishment. Some Western companies' successful experience were good examples for them to increase their understanding. However, copies of other cases did not have any help in TelcoX's own call centre set up. This experience led them to know that a 'Chinese characterized' call centre suitable in China's conditions was required. Later, acceptance of others' experience and a better understanding of their environment helped a new call centre design as well as development. Finally, a new model of China's modern call centre was successfully set up. TelcoX's people also undertook to explore and exploit their environment through systematic searches after ERP and CSS system implementation. Effective communications and reasonable work flows provided a view that ERP was the core of IS in TelcoX.

To cope with the turbulent environment, TelcoX's people learnt to detect market trends and to develop closer business relationships with both suppliers and customers. The improvement of their performance was partly because of the relationships with their business partners. These selected suppliers and co-operative customers were very experienced Western companies having professional working styles and advanced management IS. In addition, their corporate cultures were one of the main factors in influencing the way of doing business in TelcoX. Over time, TelcoX, a newly formed Chinese company, was shaped by this environment.

Understanding the environment helped employees to manipulate their environment and enabled them to acquire experience and then to take action for altering their environment. Clearly, in this study, the development of relationships between TelcoX and its business partners were mainly triggered by organisational problem solving and new business opportunity exploring before, during and after the implementation and use of e-technologies (e.g. CSS and other IS). The interactions between the human and environment promoted these relationships within and across TelcoX, which also transferred effective practices to local Chinese enterprises.

TelcoX's people developed their understanding of the socio-cultural realities shaping their daily work and through which they would be increasingly able to transform those realities. Such interactions challenged the existing structures. As introduced in chapter 7, to gain more competitive advantages, TelcoX merged with another large Chinese telecom company (Company A) in 2002. TelcoX employees realised that the institutional and structural complexity would affect their business environment, but most of them did not quit their jobs and believed that TelcoX would keep its unique corporate culture for further development. The Senior Manager of Shenzhen Branch Office of CSD expressed her opinion on the merger of TelcoX and Company A:

"Sometimes, senior managers sitting together may chat over the topic of what we will do if we are shifted to lower positions during the transformations. Some of them think it is OK if they have a good pay; some think it depends on the job description, if important then they will accept it; some think it is a matter of losing face, they would quit without any hesitation. But I have a different view that I must think if this new position has the value I expected then I would accept it. That is to say what I think is the most important thing is the future development for both individuals and company. If I were put in the position of CEO of any company without a bright future then I would rather give up than accept it."

Her idea represented many employees' attitudes towards organisational changing. It also indicated that TelcoX took serious consideration on individual career development. As she added:

"It is always the case that people working in TelcoX are promoted according to their abilities and good performances. I believe TelcoX will select the capable people because there is a comparatively good system of personnel management. No matter what position you are in,

you will not be ignored. TelcoX attach great importance to the strength of everybody.”

Over time, TelcoX people changed their environment including social, cultural, industrial and technological structures – both consciously and unconsciously, which also encouraged personal initiative and provided employees with good opportunities for self-actualization. The Senior Manager of the Operations Department explained:

“There are very few levels between CEO and the lowest working levels. Open communications are adopted widely. When I was a newcomer in TelcoX, I noticed that many people sent the CEO emails directly and I was surprised that some of them were responded to by the CEO. This had not often been seen in the traditional Chinese SOEs because something was handled backstage and not known to all people.”

The examples of the applications of ‘the 36 ji’ in this study (see chapter 8) also illustrate that organisational interactions were implicit in every exchange process and were embedded in TelcoX’s wider context (i.e. social, cultural, industrial and technological structures). These activities highlighted the interactions among organisational members.

From a relationship perspective, the dynamics of interactions between organisational members and their environment as well as among members, affected human intentions in developing their business relationships in different ways. Firstly, a closer relationship between organisational members (e.g. leaders and followers, suppliers and customers) created more opportunities to produce emerging context in which that relationship was embedded. In a wider context, this embeddedness of relationships increased the knowledge and experience for members to reproduce or change their existing context gradually. Secondly, in a dynamic environment, the degree of dynamism within a relationship and in the wider context influenced organisational members to take action in developing relationships. At the same time, these actions contributed to the dynamic of interactions. This

process of dynamism also can be illustrated from the emergence of culture. From a cultural perspective, the next section will further explore this issue.

11.2 Cultural Perspective – Dynamics of Culture

Use of CSS and other IS helped TelcoX to provide quality services for meeting new requirements of customers, to lead cultural diversity and to form new business relationships that were enabled by the application of e-technologies. These relationships were different from traditional ones. As reviewed in chapter 6, traditional Chinese people are ‘categorized’ as ‘insiders’ and ‘outsiders’, if there isn’t any pre-existing personal connection (social bond), therefore, there is no rule, obligation and reciprocity exist between ‘insiders’ and ‘outsiders’. Besides, if there isn’t any personal favour-exchange or business need that would help any ‘outsider’ to build up a solid foundation with ‘insiders’ and then become the potential ‘insider’ getting hold of business and/or non-business opportunities that will likely emerge in the future, there isn’t any relation existing between parties at all. Obviously, in this study, business needs between parties were the main factors in helping these relationships form and transform.

In addition, Western management culture seems to have a strong impact on the development of relationships. Interviews on Western-like working style in this study reflected that no personal feeling or interest involved in Westernised business relationship. As the interviewees from Western countries said:

“...It is purely working relationships...Personally, I think there is no such kind of personal relationship involved in business among English people. It is a friendship. I also try to manage selecting suppliers and balancing the business and personal relations during work very carefully...I make sure all suppliers are selected based on criteria” [the Contract Negotiator of Customer 2, a UK company]

“We generally maintain very formal relationships with suppliers. We send them our formal contracts that are very

clear, which are good for the suppliers. And then, when they complete their work to our satisfaction, we pay their invoices so they get their remuneration. We try to pay them on time; we don't delay for a long time because that causes a bad relationship, especially for the small companies... we don't want any work delay either..." [The Logistics / Service Manager of Customer 2, a UK company]

Clearly, this type of relationship was based on mutual (contractual) trust (Sako, 1992, p. 37) that was a type of trust reinforced by government regulations established through negotiations and systematic management instead of personal connections. Parties preferred to keep relationships with business partners and employees on a strictly business basis, which was different from the Chinese *guanxi* that emphasises a simultaneous development of social and business relationships.

As it can be seen that there were other cultures (e.g. Egyptian and Russian) mentioned in the interviews had similar practices as Chinese *guanxi*, the strong interpersonal relations were believed to facilitate favourable business results. However, Westerners seemed not comfortable in transforming personal relationships into business relationships through social activities. The following comments presented the view of some of Westerners' on the practice of forming business relationships:

"Sometimes, when I go Egypt, people welcome and meet me at the airport, take me around and want to show me everything. They are very kind but I cannot go anywhere... Once when I was in Russia, they met me at the airport and they were quite happy to take me around. But you know, sometimes, I need time to sit quietly and work..." [The Contract Negotiator of Customer 2, a UK company]

"...formal relationships try to keep things clean. We send them [business partners] emails and pay them on time. Sometimes, we go to have a meal with them [the UK business partners]. That is about the [contract] extension. Some of

them came to us at Christmas. That is it...we take them out for a drink and have a chat about anything in general, maybe once a year. For some of the small contracts, we won't even do that. We don't allow doing anything further than that. It is not a good business ethic in the UK..." [The Logistics / Service Manager of Customer 2, an UK company]

The above comments illustrate that the conduct of business differs strikingly between China and the West, although there were some comments coming from Chinese people such as:

"I do not like solving business problems with personal feeling involved. Because the way to solve business problems with guanxi is just opposite to that of are professional. And they may become obstacles for the development of business relationships." [One of the CSD managers]

The interviewees from Western countries expressed their concerns on the practices of personal relationships. If they accepted the invitations of social activities, they must make sure to keep their principles in balancing the personal and business relationships. Otherwise, it would cause unfair business handling, although sometimes they might not want to be involved in any social activities more than going out for a drink or a meal.

Moreover, reports to their bosses about what they were going to do were needed. Thus, when dealing with English business people, Chinese people need to be aware that English people don't come over and try not to be influenced by giving and receiving gifts. English people are very careful and try to avoid involving deep personal relationships in business relationships. Also, they feel comfortable with the certainty that enforceable commitments place on them and their partners. This is because commercial law, rules and regulations are ingrained in Western thinking.

In contrast, as reviewed and discussed earlier (see chapter 6 and chapter 9), a traditional Chinese *guanxi* is built on interpersonal connections and particularistic criteria, which attach more importance to personal

relationships. It refers to relationships between people and can be applied to family members, kinship, friendships, educational ties, bureaucratic linkages and so on and so forth relations. A direct particularistic criterion is the assumption that the two individuals share some common experiences or heritage, such as two classmates who were at the same university. Those relations may lead to business relationships as *guanxi* plays an important role in helping parties to gain a commercial foothold.

Guanxi is based rather on implicitly than explicitly mutual interests and benefits. It is dynamic and transferable (Luo, 1997, 2000, p. 12; Pearce & Robinson, 2000). For instance, in this study, if Supplier 2 had *guanxi* with Supplier 1, and Supplier 1 had *guanxi* with TelcoX, then Supplier 2 could be introduced to TelcoX by Supplier 1. Thus, *guanxi* could be established by bridging the gaps of personal connections, which can bring potential partners for an organisation as well.

The application of *guanxi* at the organisational level has become increasingly pervasive and intensive in China since the 'iron rice bowl' (*tie fan wan*) was broken in the early 1980s (Luo, 2000, p. 12). It requires great effort to maintain a life-long relationship once a *guanxi* has been achieved. However, a *guanxi* at an organisational level would be lost when an individual, who brought this *guanxi* connection, leaves. This gives the reason why some organisations sometimes reward or promote individuals who use their *guanxi* for organisational purposes (e.g., marketing, building organisational relationships) (Luo, 2000, p. 12). It also largely explains the difference between *guanxi* and Westernised business relationships.

Whereas since a *guanxi* is built up normally simply through social activities, such as inviting people to dinner or gift-giving which equals to corruption in the view of some Westerners, the establishment of *guanxi* is often portrayed as an old-fashioned way of doing business (as discussed in chapter 9). I would argue that this overemphasis of gift-giving element of *guanxi* is inaccurate and offensive to Chinese traditions. Although the legal system in China has not been well-developed historically, Chinese people usually use their *guanxi* to resolve disputes and conflicts instead of using China's laws, rules and regulations. There were still some of TelcoX's people who

believed that this approach was a much more effective and efficient way to resolve disagreements than was the judicial system (see chapter 9).

Therefore, various cultures and working styles existed within TelcoX and in its wider context; cultural diversity was likely to persist. In this particular cultural context, new practices were emerged that represent the dynamic nature of culture.

The emerging concept that is termed as *guanxi-platform* in this study is built on both personal connections and business needs. As discussed in chapter 9, to establish a *guanxi-platform*, it was necessary for TelcoX and its business partners to have various social and business activities, through which people can make each other's acquaintance and promote mutual trust. In addition, new knowledge and experience could be gained in these activities.

Besides these normal channels, systematic management was a new practice of a *guanxi-platform* in TelcoX, as well as across organisations in China. People held principles and the flexibility was allowed only when it did not go against the principles, although all these *guanxi-platform* were restricted by the laws and regulations in this study.

Stripped of its emotional content, there are similarities between *guanxi*, *guanxi-platform* and Westernised business relationships. The mutual interests or business needs of both parties to the relationships are the common elements. Table 11.1 illustrates the major factors, practises as well as laws and regulations to be involved in forming *guanxi*, *guanxi-platform* and Westernised business relationships.

	<i>Guanxi</i>	<i>Guanxi-platform</i>	Westernised business relationships
Major factors to form the relationship	<ul style="list-style-type: none"> • Built on interpersonal connections and particularistic criteria 	<ul style="list-style-type: none"> • Based on both interpersonal connections and business needs 	<ul style="list-style-type: none"> • Simply based on business needs
Practices	<ul style="list-style-type: none"> • Attach more importance to personal relationships • Based on implicitly mutual interests and benefits • Dynamic and transferable • Simply through social activities, such as inviting people to a dinner 	<ul style="list-style-type: none"> • Based on mutual trust • Through social activities • Through normal channels, such as marketing events and continuous practices, • Through negotiations, processes / systems and people (acquaintance) 	<ul style="list-style-type: none"> • Based on mutual trust • Less personal feeling or interest involved • Through negotiations, processes or systems instead of people (systematic management)
Laws and regulations	<ul style="list-style-type: none"> • Not restricted by laws and regulations 	<ul style="list-style-type: none"> • Restricted by laws and regulations 	<ul style="list-style-type: none"> • Restricted by laws and regulations

Table 11.1: Comparison of *guanxi*, *guanxi-platform* and Westernised business relations

From a cultural perspective, findings from this study indicate that relationships at both individual and organisational levels were crucial for developing and maintaining e-supply relationships. As the existing cultural context (e.g. a mix of traditional Chinese cultural values and Western management culture) influenced organisational members to form their relationships, these relationships enabled organisation to develop and also a constraint on that development.

As a result, the existing cultural context is changing. Over time, the emerging cultural context (e.g. a fusion of Chinese and Western culture) is produced through mixed practices (e.g. *guanxi*, *guanxi-platform* and Westernised business relationships). It can be seen that the formation and transformation of both personal and business relationships were enacted by the dynamics of the cultural context (e.g. the emerging practice of *guanxi-platform* was enacted by the fusion of Chinese and Western culture).

11.3 Technological Perspective - Dynamics of E-technology-in-use

With regard to e-technology-in-use, organisational members' actions reinforced and redefined certain structures by using e-technologies. It assumed the existing technological structure was being shaped both within TelcoX and the wider context. In this case the implementation of CSS and the development of call centres were the results of co-ordinated departmental work. The technologically constructed nature of CSS representing certain interpretative schemes of TelcoX's departments was perceived as 'manageable co-handling' by CSD team who wished to further develop the use of call centres in the light of their experiences. TelcoX's leaders provided an impetus for change through the use of e-technologies. Changes in the CSD's job flow and TelcoX's work process and the consequences were triggered by CSS implementation. Use of CSS and other IS in TelcoX provided new structures which were shaped by this change process. The emerging structure was the result of previous actions, which enabled and constrained managers' actions for forming and transforming of e-supply relationships.

In the process of collaboration between departments and business units, a number of discussions were involved in problem solving. This iterative process of discussion drew attention to the elements of change in the mutual shaping of the technological construct. For example, the constraints of the use of e-technology became open to discussion among employees. The email system limited employees to verbal interaction, but allowed them to 'talk' to people at times when face-to-face interaction would be difficult, impossible or undesirable. The constraints of working within the existing technological structure reflected actors' understandings and interpretations of the use of e-technologies.

Changes in the existing structure were experienced in a range of different ways by various individuals, groups and organisations during the use of e-technologies. It had shown different perceptions of e-technology-in-use over this process of collaboration. For TelcoX and its suppliers, as discussed in chapter 10, promotion and the use of e-technology could radically change TelcoX's work process, provide quality customer services as well as

improve business effectiveness. It was seen as an organisational strategic choice through introducing technological structural changes to improve their work environments. Also, it was recognised as a work process or new channels of communications in which existing technological constraints were linked to the emerging structure.

Over time, a new technological structure had emerged in TelcoX that represented the dominant view of the employees. Within the constraints some of the conflicting views had not been presented, because those views were not possible to further develop the consequence of previous actions that were often reconstructed to the existing structure. The emerging structure downplayed conflicts whilst simultaneously applauding success and emphasizing collaboration. This ongoing dynamic process both enabled and constrained collaboration between and across TelcoX in its wider context. In practice, it reflected a complex organisational change process in the implementation and use of e-technologies in TelcoX. By engaging in this process individuals and/or organisations redefined organisational structures and opened up new possibilities and options in the use of e-technologies.

In this study, the formation and transformation of e-supply relationships were followed by a series of technological changes of TelcoX as well as its business partners. TelcoX seemed to be able to respond quickly to these changes. The results of this study show that managerial actions in developing and maintaining e-supply relationships were strongly linked to these changes. These e-supply relationships were enacted in the dynamic technological context by managerial actions that significantly changed the existing technological structure.

11.4 Structurational Perspective

- Dynamics of E-supply relationships

As managerial actions on the use of e-technologies reinforced the technological structure in TelcoX, from the point of view of users, the adaptation of CSS and other IS in TelcoX was seen as partly driven by the

advances of these e-technologies. Orlikowski, Yate, Okamura, and Fujimolo (1995) argue that the explicit contextualization of electronic ICTs and the patterns of use of these ICTs facilitate organisations to use of these ICTs in changing their organisational forms over time. This section, from a structurational perspective, continues to address the dynamics of e-technology-in-use during e-supply relationship formation and transformation in TelcoX.

Giddens (1979, 1984) proposes the notion of structure (or structural properties of social systems) as the set of enacted rules and resources that mediate social action through three modalities: facilities, norms, and interpretive schemes. In this sense, TelcoX's employees drew on their knowledge of their previous actions and the situation at hand, the available facilities (e.g., organisational resource, e-technology), and the norms that informed their ongoing practices (e.g. *'the 36 ji in the digital era'* and *guanxi-platform*), and then, applied such knowledge, facilities and norms to structure their current actions. In doing so, they recursively reconstituted the rules and resources that structure their actions.

In the early stage of the TelcoX establishment, CSD people were working on stand-alone PCs with simple applications to handle and record their customer calls. But those non-systematic follow-ups that were called the 'casual way' within TelcoX didn't help them to provide quality services. So, senior managers decided to adapt new system of CSS. That was what they had experienced in call centre development. By using of call centre and CSS, effective collaboration and communication both internally and externally were enabled. Since human interactions with e-technologies are typically recurrent, so that even as users constitute a technology-in-use through their present use of a technology, their actions are, at the same time, shaped by the previous technologies-in-use that they have enacted in the past (Orlikowski 2000).

With great effort, the new call centre was designed, built up and developed in TelcoX. Employees' knowledge and skills in the use of CSS had been exposed over the years, which influenced the construction of CSS in

TelcoX's branch offices all over China. This reflected the view of Orlikowski (2000, p. 410): 'ongoing enactment of a technology-in-use reinforces it, so that it becomes regularized and routinized, an expedient and habitual response to repeated use of a technology within the daily exigencies of organisational life.'

TelcoX's people also drew on their knowledge of and experiences with their institutional contexts, i.e. cultural, technological, in which they were exchanging and interacting. In this way, employees' use of e-technologies became structured by these experiences, knowledge, meanings, norms and relationships. Comments from senior managers and employees interviewed, strongly represented TelcoX's specific set of rules and resources in practice:

"I think the relationships [personal and business] among TelcoX people are good. Most of them are more or less of the same generation, are comparatively speaking easy to deal with. They go in for the same goal with less people for selfish interests. The majority of them would like to experience a process of hard struggle for building up a company of a new type. They feel very much honored with the special background instead of a good salary. " [The Senior Manager of Operations Department]

"Generally speaking the working style of managers will be followed by their team members or even by the whole department. The good communications and co-operations among departmental leaders can lay down good foundations of departmental co-operations." [One of CSD managers]

"I was deeply inspired and moved by TelcoX's corporate culture. Nevertheless, it is easy to speak but not so easy to meet the requirements. TelcoX's corporate culture 'sixteen words' slogan is practical helping us to distinguish the right from the wrong. And it also tells us how to behave ourselves. Both my team members and I enjoy our work in TelcoX very much. It is always the case that everybody is working crazy

especially at the end of each month..." [The Senior Manager of Accounting & Finance Department]

In practice, such structuring enacted TelcoX's emerging set of rules and resources, which then served to structure future use as employees continue to interact with the e-technologies in their recurrent practices. Thus, over time, employees constituted and reconstituted a structure of e-technology-in-use in which e-supply relationships were formed and transformed.

11.4.1 A synthesized framework on e-supply relationships in the network context

As discussed in chapter 8 to chapter 11, the analysis of the data from a relationship, a cultural, a technological and a structural perspective indicates that the implementation of CSS and adaptation of newer type of e-technologies in TelcoX helped to form organisational business relationships. Two interacting elements that were shaping the transformation of e-supply relationships in the network context of TelcoX had been identified: managerial actions and social structures.

Managerial action was perceived as planned and unplanned actions taken by managers involved in decision-making, their leadership behaviour and organisational interactions. The managerial actions and changes in communication patterns were particularly looked at with respect to, and in response by, implementation and use of CSS, and corporate and wider cultural contexts of TelcoX. Social structures included both technologies in use (e.g. use of CSS and other emerging IS that enabled and constrained interactions) and social, cultural and industrial contexts that was reinforced and transformed by such interactions. Changes in the CSD's work process and the consequences were triggered by the new CSS system design and implementation. Use of CSS by CSD people and adaptation other IS in TelcoX provided a new set of features which both enable and constrain managers' planned and unplanned actions for forming of e-relationships.

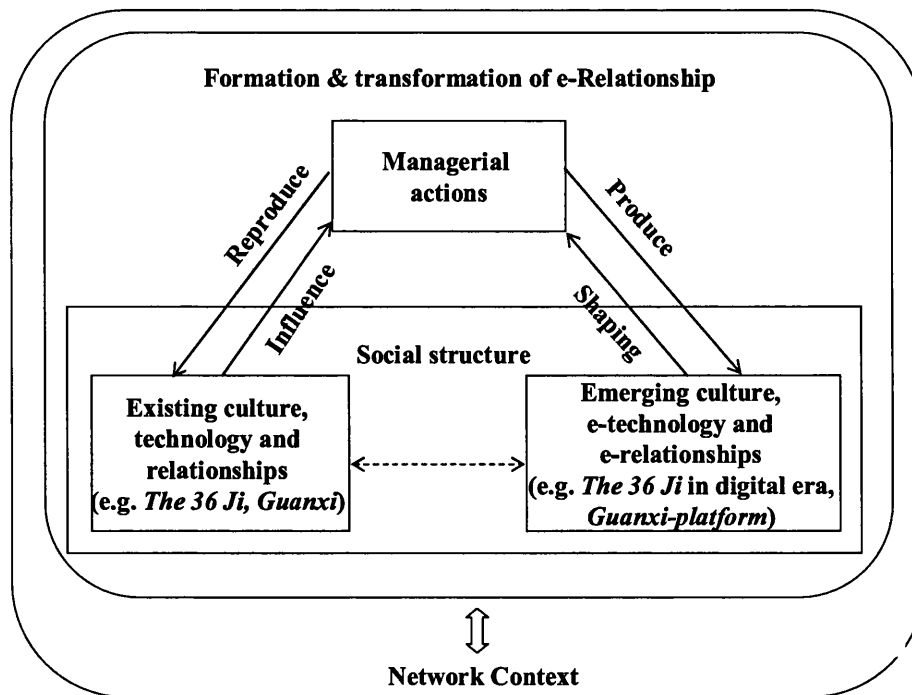


Figure 11.1: Interaction between human actions and social structures

By drawing on Giddens (1984) and Orlikowski (2000) the process can be seen as circuits of interactions between human actions and social structural properties. Figure 11.1 depicts this process of e-relationship formation that can be seen as circuits of interactions between human actions and social structures. As illustrated in Figure 11.1, the existing social structures (e.g. culture, technology and relationships) influenced managerial actions in building relationships both within and across organisations; in turn, managerial actions reproduced existing social structures, or produced new social structures (e.g. new cultural context, e-technology and e-relationships). As these e-relationships were enacted as emerging social structures by managerial actions, at the same time, these actions were shaped by these constitutions.

Table 11.2 shows the key themes and elements from the case study. The linkage of the understandings from a relationship, a cultural, a technological and a structural perspective strengthens the theoretical foundation of this study.

Theoretical perspectives	Key themes and concepts
Relationship perspective	<ul style="list-style-type: none"> • Emerging organisational interactions - The role of '<i>the 36 Ji</i>'
Cultural perspective	<ul style="list-style-type: none"> • Emerging national and corporate culture of TelcoX - Chinese cultural values and implications in Chinese SOEs - New concept <i>guanxi-platform</i>
Technological perspective	<ul style="list-style-type: none"> • Emerging e-technology-in-use - Implementation and use of CSS and adaptation of other IS - Changes of organisational work process - Creation of multiple communication channels - New management systems providing, i.e. perspective of CSS is 'management co-handling'; the view of ERP as the core of the IS
Structurational perspective	<ul style="list-style-type: none"> • Managerial actions - Leadership - Decision-making - E-supply relationships building up • Enactment of structures - Emerging organisational interactions - Emerging national & corporate culture - Emerging e-technology-in-use

Table 11.2: Key themes and concepts from the case study

Firstly, the combination of the four bodies of knowledge helped to establish a broader view on organisational relationships development. It examines organisational responsiveness in terms of the effect of organisational internal factors (e.g. leadership behaviour) as well as external environment on organisational decision-making. These key themes represent an important contribution in influencing e-supply relationship formation and transformation in this study.

Secondly, the emerging concept of '*guanxi-platform*' emphasises the importance of the Chinese cultural norms in the dynamics of e-supply relationships.

Thirdly, a number of ideas and views from previous studies have been confirmed in this study. The findings suggest that it is important to young

Chinese companies such as TelcoX to improve organisational responsiveness to the environment (e.g. the execution of strategies of gaining distinctive competences).

Fourthly, since this study has been undertaken to examine the cultural issues associated with e-supply relationships formation and transformation in Chinese context, it contributes to the literature by offering an exploratory study and strengthens cultural studies. In particular, this study pays attention to the socially constructed reality, to the symbolic significance of all aspects of organisation and to share systems of meaning and interpretive schemes.

Fifthly, this study reminds us that a facet of government policy-making is growing in importance. Chapter 13 will further discuss the implications for use of e-technology in the dynamics of business relationships formation and transformation.

11.5 Concluding Remark

The findings imply that the extent and effectiveness of the use of e-technologies is the result of several issues, which can have both direct and indirect influences on e-supply relationship management. It suggests that organisations should consider its wider context when doing business in the competitive global market. The effective communications between suppliers and customers both within and across organisations are critical for the organisational development and the improvement of the performance of entire supply chain, which reinforce the wider context structuring and restructuring. At the same time, the produced and reproduced contexts shape and are shaped by the human actions and interactions with the social structures.

Through an illustrative example, this chapter presents the practices reported in TelcoX's daily work that allow the dynamism of the e-supply relationships formation and transformation to be discovered. In this study of the use of e-technology in establishing and maintaining business relationships, the focus of the practices is to use structuration theory as a meta theory. The effects of the results of dynamics of organisational

interactions, the dynamics of culture, the dynamics of e-technology-in-use as well as the enactment of the structures are also investigated. The main goal of this analysis from a structurational perspective is to illustrate how the relationship, cultural and technological perspectives are linked together.

Having drawn on structuration theory (Giddens, 1976, 1982, 1984) as a meta theory, this data analysis of a conceptual and analytical synthesis is presented in Figure 11.1. The empirical understanding generated in this context has implications for both theories on relationship studies and managing organisational inter-dependency of IT based business relations. These implications will be provided in chapter 13.

PART VI CONCLUSIONS & IMPLICATIONS

Chapter 12

CONCLUSIONS

Each chapter of this thesis covered a particular part of this research and summarised it by providing a concluding remark. This chapter concludes the findings from this study on the use of e-technology in the dynamics of business relationships transformation by bringing together all the conclusions in a holistic manner and reflecting on the relevant literature. Section 12.1, 12.2 and 12.3 provide key claims on transformation of e-supply relationships as well as the answers to the core research question formulated in chapter 1. This chapter closes with section 12.4, which provides a summary of key claims and answers to the emergence and transformation of e-supply relations in the network context.

12.1 Transformation of E-supply Relationships as Cultural Change

With the emergence of the e-technology, the technological basis for connecting an organisation's internal IS with outside networks is created. Because these shared IS relating to ITs help organisations overcome problems of distance and time, they are often used between suppliers and customers geographically for organisational interactions. It is claimed that the use of e-technologies in an organisation speeds up internal communications and co-ordination in the daily business work. Therefore, suppliers may achieve more value from their customer relationships through internal efficiencies. As such, the adaptation of e-technologies in an organisation serves as the basis for shared IT solutions.

ITs continue to develop and business has become increasingly international, an orientation towards strong, lasting relationships (Jackson, 1985) and the need for a better understanding of communications between organisational members of different cultures, is even more crucial. Moreover, growing competition for international markets is another reason for considering cultural distinctions. It not only requires organisations to have a good

understanding of their own cultures, but also of other organisational cultures and how people in other organisations or countries understand their cultures.

However, the study of business relationships across different cultures has yet to reach a level of organisational understanding, especially how culture influences the development of relationships within different cultural contexts (Roslin & Melewar, 2004). Arias (1998) notes that the Chinese culture is based on co-operation rather than competition. In particular, China is likely to have a cultural environment that is considerably distant from the Western countries, such as the US and the UK, which is more complex to manage than that found in a Western context. This can be best understood with the idea of individualism-collectivism (Hofstede, 1980) as discussed in chapter 4.

In the Chinese cultural context, this study focuses on the dynamics of the formation and transformation of the supplier-customer relationships both within and across organisations. It is underlying cross-cultural working in the e-technology enabled organisations. An additional feature of this workplace was that call centre was operating in a different location with TelcoX's main office building. However, the existence of an outsourced call centre with different specifications had led management to manage it effectively as a profit centre. CSD managers were still learning to develop consistent internal regulations and approaches under TelcoX's corporate culture, as it was explored.

As discussed above, cultural structure is an important factor in the effective communications through IS within and between organisations. Researchers such as Thompson and Widlavsky (1986) also highlight the relationship between culture and the use of IT in organisations. Changes in main areas of organisational objectives attempt towards focusing on core businesses or in targeted markets and major shifts in technology. One example of such a cultural change is the implementation of the strategy of CRM.

A CRM strategy requires changes in the management of an organisation. It also has implications for changes in supplier and customer interfaces. These

organisational responses involve changing the underlying culture of the business with new visions of leadership that affect such changes.

During the last 20 years, leadership theories and frameworks have emphasized the role of leadership in driving cultural change (Thomas & Lindsay, 2003), leaders' capabilities to sustain organisational performance (Boehnke, Bontis, DiStefano, & DiStefano, 2002), decision-making (Zhu, 1999), the profession of leadership (Brien, 1998) and motivational aspects (Trice & Beyer, 1986, pp. 113 - 165). Leadership models have developed from relatively simple and static ideas of transactional leadership to complex and dynamic models of transformational leadership (Torpman, 2004). Concerning the maintenance of consistent decision-making utilizing transformational leadership, this case study employs an interpretive approach to understanding the role of transformational leadership in developing and maintaining organisational relationships that are enabled by the application of e-technologies.

It is obvious that the role played by TelcoX's leaders was critical to their organisational development, which was reflected in two different but equally important ways: making decisions and dealing with other people (see chapter 8). Having an ability to make decisions and a willingness to interact with others are extremely important for leaders to manage their jobs. In this case study, leaders confronted problems directly and decisions were consistent with the values and objectives of TelcoX. In their routine actions, listening to others' views carefully and respect for employees helped leaders to conduct business effectively. More and more activities were encouraged to be undertaken with a team effort for building up collaborative teamwork.

A new way of building up both personal and business relationships emerged as '*guanxi-platform*' during their day-to-day business practices in this context. Much of TelcoX's leadership was based on personal styles, such as leaders setting specific goals and celebrating team accomplishments, stating their principles and setting examples, and creating their departmental cultures. Employees were often impressed by their leaders' behaviour.

It is also very important to note that leadership was also used as a tool to support TelcoX's people and to bring together the different values and subcultures through communications and teamwork within and across organisations. For example, to set up a new call centre, leaders reach out to all team members and bring all possible solutions to bear on problems. They also learnt to understand how to meet the needs of their company and to consider the vision of the future company for helping the development of TelcoX. Not surprisingly, the transformation of e-supply relationships had been seen as an organisational cultural change.

12.2 Transformation of E-supply Relationships as the Implementation and Use of E-technologies

As seen, the increasing customer demand, complexity of services, e-business which enabled by the application of newer type of ITs as well as globalisation are key drivers for changing webs of relationships dynamically in the supply networks (Harland et al., 1999), many organisations create customer value through customer service improvement by using ITs (Ives & Learmonth, 1984; Ives & Vitale, 1988; Ives & Mason, 1990; Feeny, 2001). The CRM implementation, therefore, provides an opportunity to organisations to weed out inefficient processes that do little to improve customer service. Burgers et al., (2000) argue that these e-technology enabled services require providers to have a good knowledge of certain technology and to make the effort to understand the specific customers' needs.

CRM is considered as a tool specifically designed for one-to-one customer communications (Peppers & Roger, 1999) or a business process initiative towards building customer-centric organisations based on a relationship marketing principle. Chen and Popovich (2003) state that CRM is not merely technology applications for marketing, sales and service, but rather, when fully and completely implemented a cross-functional, customer-driven, technology-integrated business strategy. As reviewed earlier, a CRM business strategy leverages marketing, operations, sales, customer service, human resources, R&D and finance as well as IT to maximize profitability of customer interactions.

The rapid growth of China's telecom industry is also driven partly by the emergence of competition in the global telecom market. Therefore, industrial innovations and implementations of new strategies in Chinese enterprises for gaining competitive advantages are required. The telecom enterprises have been developing new ideas on market competition through the innovations in customer service and co-operation between suppliers, customers and competitors. An increasing number of enterprises are paying more attention to exploring new business opportunities while meeting their existing customers' needs; simultaneously, they are developing win-win business relationships with their business partners in order to effectively utilize the resources and investments, to develop national competitive advantages in this industry, and to implement strategies for competing globally.

In this study, in order to execute a CRM strategy, a new call centre development and the implementation and use of CSS in TelcoX are understood as specific e-technology that enable organisational relationships. CRM has grown into a full-blown management discipline for some Chinese enterprises. The transformation of e-supply relationships was triggered by the implementation and use of e-technologies, such as CSS.

12.3 Transformation of E-supply Relationships as Organisational Change

Taking the notion of change as ongoing improvisation with the focus on situated action (see, Suchman, 1987; Hutchins, 1991; Lave, 1988); this study examines a variety of issues relating to TelcoX's call centre design, the implementation and use of CSS that echoes the idea of "designing-in-action" (Ciborra & Lanzara, 1991). It was using a range of possible explanatory theories under the three parts of Pettigrew's (1985) "context, content and process" model that is suggested as more appropriate for today's ever-changing global markets. This model has been applied by researchers, such as Orlikowski (1993), who suggests that it is important to consider the social context of system development involving a process of organisational change over time when seeking effective change. Orlikowski

(Orlikowski, 1996) also outlines a situated change perspective on organisational transformation which proposes change as endemic to the practice of organising and hence as enacted through the situated practices of organisational actors as they improvise, innovate, and adjust their work routines over time.

Informed by the above notions of change, this study explores the context of change including inner and outer contexts. Outer context refers to aspects such as globalisation, international competition, shared technological change and industrial restructuring faced by TelcoX; whereas inner context was concerned with TelcoX's internal influences such as corporate culture, organisational strategies. A CRM strategy execution and the consequences such as e-technology-enabled work process, change and relationship formation and transformation was understood as the content of change.

This study focuses on the process of change on e-supply relationships during the design, development, implementation and use of the call centre and the CSS system since 2001. The conceptualisation in this study (see Figure 11.1) describes the process of how the e-supply relationships form and transform. This view of organisational transformation as situated change, is grounded in assumptions of action, not stability, as Giddens (1984) argues that organisations are enacted, which are constituted by the ongoing agency of organisational members, and have no existence apart from such actions.

Change is thus inherent in everyday human actions. Therefore, a dynamic character was obtained by a succession of actions and interactions in which changes appear gradually. It demonstrates the transformation of e-supply relationships as TelcoX's organisational change.

In the following section I seek to demonstrate how the findings and the insights that this study has offered into the emergence and transformation of e-supply relationships in a large Chinese telecom enterprise, address the key research question raised in chapter 1.

What are the roles of national and corporate cultures in helping to establish and maintain e-supply relationships both inside and between organisations?

The study identifies a range of cultural issues relating to the wider network context in relation to emergence and transformation of e-supply relationships. The findings offer some insights into the importance of national and corporate cultures in shaping the supply relationships enabled by the application of newer types of e-technologies (CSS and other IS). TelcoX had a fusion of traditional Chinese and Western cultures that made it different from the more typical Chinese SOEs. It was also establishing an emerging cultural context for TelcoX's organisational interactions when conducting its business activities. This unique cultural context seemed to have a positive influence in the evolution of e-supply relationships with both suppliers and customers. From a cultural perspective, the cross-cultural working and the formation and transformation of e-supply relationships within and outside TelcoX presented a dynamic view of culture. These e-relationships existing in TelcoX as well as within the context of its wider network influenced and were influenced by the corporate cultural change.

The main issues such as managerial actions, e-technology-in-use within the national and corporate cultural contexts as well as the ongoing organisational interactions played key roles in shaping the e-supply relationships. The formation and transformation process is conceptualised as the interplay of these two elements: managerial actions and social structures. The managerial actions were perceived as intended and unintended actions leading to the formation of emerging cultural and technological structures, which in turn were shaped by these structures. The social structures included e-technology-in-use (e.g. CSS and other emerging IS that enabled and constrained organisational interactions) and the social, cultural and industrial contexts that were reinforced and transformed by such organisational interactions. In the Chinese context, international business is one of the main driving forces for using e-technologies. Thus, driven by the global telecom markets and influenced by the national cultural and technological contexts, the design, implementation and use of the e-

technologies (e.g. CSS and other emerging IS) triggered the changes in TelcoX's work process and the way for interacting both within and between organisations. Over time, the way of establishing e-supply relationships was influenced by the cultural and technological contexts.

The interplay between managerial actions and social structures indicates that the managerial actions were influenced by the existing national and corporate cultural and technological structures for organisational interactions in each exchange process. Emerging organisational interactions helped TelcoX to manage the changes of the e-technology-in-use and the national and corporate cultural structures, which were produced and reproduced within these structures. With respect to the formation and transformation of e-supply relationships, the implementation and use of e-supply technologies (e.g. CSS and other emerging IS) helped to form the e-supply relationships within the corporate and wider cultural contexts of TelcoX.

The conceptualisation of the emergence and transformation of e-supply relationship of TelcoX in its network context represents circuits of the interactions between human actions and social structures, in particular, the cultural and technological contexts within which the interactions were taking place. In other words, the organisational interactions were taking place within emerging corporate cultural and technological structures, as a result, the emergence of e-supply relationships shaped and transformed these emerging structures. For instance, the emergence of the new concept of *guanxi-platform* represents the development of TelcoX's corporate culture. It was recognised and accepted by more and more organisational members when establishing their business relationships within and outside TelcoX (see chapter 8). *Guanxi-platform* was seen as an appropriate way for both Chinese and Western companies to form relations with each other when doing business. Since not only had *guanxi-platform* created opportunities for organisations to interact with each other, but also provided respectable chances for individuals to meet their requirements on personal relationship development, *guanxi-platform* was sustained in TelcoX as well as in its wider network context. At the same time, TelcoX and its wider context were transformed through the formations and alternation of relationship.

The findings imply that the extent and effectiveness of the use of e-technologies depends on several issues, which can have both direct and indirect influences on managing e-supply relationships. The findings indicate that new Chinese telecom enterprises seem to have a higher tolerance for cultural differences and a willingness to accept alternative viewpoints, but when different national and industrial factors are taken into account, wide variations exist in developing and maintaining business relationships. In particular, the key variation with respect to e-supply relationships is rooted in the cultural norms of *guanxi*. Although the impact of social on business relationships is certainly not peculiar to the Chinese society, traditional Chinese *guanxi* and the new concept of *guanxi-platform* have important impacts on the success of the telecom enterprises in the ever-changing Chinese environments. The data analysis in Chapter 8 compared Chinese traditional practices of *guanxi* with the current ones of *guanxi-platform*. It also illustrated that an approach which can meet people's requirements without emphasizing personal interests may work well in establishing business relationships among organisations in a new Chinese context. A better understanding of China's unique business environments and emerging concept of *guanxi-platform* will not only help many Western companies enter the most emerging Chinese market, but also enable China's telecom industry and companies to make significant changes in the near future.

With the changing of China's social, economic and telecom structures, organisational interactions and communication patterns may be changing. They may not apply identically to all industries and organisations but do offer several empirically supported perspectives for understanding the formation and transformation of e-supply relationships, in particular the cultural context. The empirical understanding generated in this context has implications for managing organisational inter-dependency of IS enabled business relations, and assessing the effects of managing such relationships. For managers, these insights not only open up cultural aspects of supply relationships but also suggest that emergence of different cultural norms may accompany the enactment of e-supply relationships. The insights would

be particularly valuable for Western organisations forming alliances with Chinese enterprises.

12.4 Concluding Remark

This chapter contains the core arguments of this thesis. Emergence and transformation of e-supply relationships are explained as cultural change, the process of implementation and use of e-technologies and the wider organisational change. These considerations come together in the concept of dynamism of structuration. The answers to the core research questions demonstrate that cultural issues are one of the most important keys to the social structures formation and transformation. The expression of structuring in organisational, industrial, or social contexts is clearly defined in the theoretically developed framework (see Figure 11. 1) and readily operationalised for further empirical research in other network contexts.

Chapter 13

IMPLICATIONS FOR THE USE OF E-TECHNOLOGY IN BUSINESS RELATIONSHIPS TRANSFORMATION

This chapter outlines the implications of findings from this study for both theory and practice on the use of e-technology in the dynamics of business relationships transformation. Section 13.1 provides general information on theories relating to this newly developed synthesized framework on e-supply relationships. The following section 13.2 discusses the links between the theories and practices in this study. Managerial implications are discussed in section 13.3 by providing guidelines on the adaptation and use of e-technology related services. It covers the implications for emerging economies, for policy makers and for practitioners. This chapter closes with section 13.4, which provides a summary of issues related to the implementation and use of e-technology in developing and maintaining business relationships in a supply network.

13.1 Introduction

Using an in-depth case study in a newly formed large Chinese telecom company engaged in supplier-customer relationships, this study gives some empirical evidence for the framework (see Figure 11.1). With regard to relationship management, the findings give new insights into the role of IT in value-creation in B2B relationships. The data analysis of this case study provides additional clarity on the role that cultural conflicts play in the performance and evolution of young Chinese enterprises. Theoretical and managerial implications in this area are also discussed.

The newly developed framework on the e-supply relationship in the network context that was presented in Figure 11.1, provides a foundation for further theoretical development. In completing this account of the evolution of this framework, it should be considered how it fits with relevant theories. This framework has implications for shared technological change and for

theories relating to relationship theories, intra- and inter-organisational relationships as well as strategic collaboration. In discussing each of these below, the links to practice is identified in each case. This shows how the theoretical basis and practical applications are related.

13.2 E-technology and Business Relationships

Shared technological change

It can be seen that technological change presents a great potential for affecting e-technology enabled business relationships development. The advances of e-technology allow buyers to make their purchasing decisions while e-technology enables suppliers may enjoy wider access to market across the world (see Foo, 2003). Simultaneously, a supplier-customer relationship is established between physically distant parties in a supply network. It is defined as an 'e-supply relationship' in this study. Driven by this need for a technological solution to enable an organisationally effective business process planning, the implementation and use of a technological solution would require decision-makers' in-depth understandings of both technological and operational processes in order to meet organisational business needs. In addition, because of the unpredictable nature of technological change, it is critical for organisations to understand how to develop and maintain existing, as well as new e-supply relationships.

In this case, with the completed understanding and considerable analysis of organisational conditions, senior managers decided to implement CSS and other IS in TelcoX. These e-technologies not only enabled TelcoX to provide customers better services and improve business performance, but also ensured employees to conduct their jobs systematically. The use of e-technology influenced these e-supply relationships both within and outside TelcoX to develop and maintain. The synthesized framework (see Figure 11.1) in this study illustrates the key elements influencing e-supply relationships formation and transformation; and it helps to explain how to manage the new form of business relationships (i.e. e-relationships) by taking e-technologies into account.

Relationship theories

The literature underpinning relationship theories embraces a wide range of issues that need to be incorporated in any attempt to further relationship studies. For example, to take a view of exchange, the economists focus on the transaction content (e.g. Williamson, 1985) by concentrating on the efficiency of transaction. Whereas, the behaviourists focus on the social processes of exchange and bring social structure (e.g. Cook & Emerson, 1984; Aldrich, 1979) and interdependence such as resource dependency (Pfeffer & Salancik, 1978; Barney, 1991; Dierickx et al., 1989) to the study of relationships.

Since late 1970s, the IMP group began the conceptualisation of the exchange relationship as an interaction process (e.g. Håkansson & Wootz, 1979; Håkansson, Wootz, Andersson, & Hangard, 1979; Håkansson, 1982). Macneil (1980, p. 913) argues that “the restraint of power is a norm common to all contracts” by examining exchange relationship as a social contract. The norms he proposed are further studied by many researchers; the process content is thus studied by involving in key social elements such as trust (Sako, 1992; Mayer et al, 1995; Blois, 1998), commitment (Morgan & Hunt, 1994; Gundlach et al., 1995; Kent & Mentzer, 2003), collaboration (Lamming, 1993; Wasti & Liker, 1999; Humphreys et al., 2001) and co-operation (Campbell, 1985; Morgan, 1987).

Therefore, to deal with the multiplicity of issues in different aspects, the development of a joint approach may lead to gain a better understanding on manage the process of relationship development. Hence, the conceptualisation offered in this study emerges as a process-focused model aiming at understanding the key factors from four perspectives (e.g. relationship, cultural, technological and structurational perspectives) in managing relationships.

Inter-organisational relationships

There is a body of studies in the way specific relationship between the (focal) organisation and the other components of its environment are

conceptualised. For instance, relationships are conceptualised as a series of dyads between specific organisations (e.g. Robins & Boldero, 2003; Anderson, Håkansson, & Johanson, 1994); relationship between the focal organisations and the environment in which the focal organisation is affected by the environment (e.g. Sarkis, 2003; Dess & Origer, 1987); and levels of analysis of relationships are considered (Harland, 1996). These studies imply that when establishing IORs, organisations anticipate mutual benefits arising either in the existing relationships or from its impact on other relationships. Thus, many organisational activities can neither be explained simply by analysing of a single organisation nor member organisations.

This case study considers TelcoX as both a supplier and a customer. Not only is it considering a call centre, a customer service department but also an organisation that works with its suppliers and customers both internally and externally. As a supplier TelcoX was subjected to the influences of external customers on internal working relations and outcomes. As a customer it formed different types of relationships such as an outsourcing relationship to provide an additional means of responding to customers' demands. Thus, TelcoX is viewed as embedded in a web of relations in a supply network, both internal and external, which have been explored in this study. The framework developed in this study helps to explain organisational activities by analysing organisations from different views, in different positions (e.g. supplier or customer). In other words, it helps organisations to understand the essential factors influencing organisational relationships and draw sustainable competitive advantages from the relationships with both their suppliers and their customers.

Strategic collaboration

Lamming (1993, pp. 238 - 239) argues that partnership in supply chain relationships is a very powerful strategy. However, many suppliers see it as just another way of appeasing the customer. Therefore, a framework which goes beyond the partnership is proposed by Lamming, "lean supply", which "emerges as the state of business in which there is dynamic competition and collaboration of equals in the supply chain, aimed at adding value at a

minimum total cost, while maximizing end-customer service and product quality.” Lamming (1993, p. 244) also states that lean supply is “for developing strategic collaboration – the basis for the relationships which have emerged as crucially important for the next phase of global business.” Hence, it can be a very useful means of handling the impact of strategic restructuring initiatives on the structure of an organisation by using strategic collaboration.

This case study helps to gain a better understanding of ‘strategic collaboration’. In 2002 TelcoX merged with another large Chinese telecom company, Company A, which consolidated the telecom expertise in several units into one industry practice, but the anticipated efficiencies and synergies still had not appeared a year later. The establishment of a new subsidiary of TelcoX in late 2003 focusing on providing comprehensive services to international carriers and enterprises outside of China revealed the significance of clustering in the telecom services. It was viewed as “a skill-profiting system and a virtual environment to promote collaboration” between TelcoX and its Customer 1. This collaboration also helped employees of both parties to meet and learn the projects that other companies were working on.

It was clearly shown from the ‘strategic collaboration’ between TelcoX and its customers, including co-operative resources that would help improve resources utilization for both parties. For example, Customer 1 was setting up a project team to work with TelcoX in China in which Customer 1 was expanding its business for providing end customers standard services throughout its business overseas. While TelcoX was available to Customer 1 as its business capabilities on operation and management were becoming mature. “It entailed a great deal of change of ownership of the process – a disaggregating of the chain – and with it, a new honesty in supply chain relationships” (Lamming, 1993, p. 239). This collaboration marked a great beginning for TelcoX and its Customer 1 to conduct further mutually beneficial projects in the interest of progressive and effective professional training and development, which were relevant to both current and future business needs.

13.3 Management Guidelines on Adaptation and Use of CSS Related Services

For emerging economies

As more attention of the global telecom companies is focused firmly on China's development, this study holds out powerful implications for emerging economies. Given the rapid growth of economies and populations, there are a number of implications for emerging economies that indicate a need to develop and implement well-targeted policies and thereby to lessen the impact of change. Great efforts have been made in reforming telecom sectors and SOEs, promoting the idea of innovation and the use of resources such as newer types of ITs. However, efforts of creating new model of Chinese SOEs have been affected by the conflict of different cultures. Challenges facing emerging economies are far more extensive than the preceding ones. In particular, financial shortages present major pressures on emerging economies in their attempt to adapt and use of emerging e-technologies. This could possibly be solved through the encouragement of foreign investments and the expansion of co-operation with international organisations.

The effects of supplier and customer interactions will have important managerial implications for multinational companies entering emerging economies. For example, customer demands often involve the quality of a service. China now has become one of world's largest emerging telecom markets, new government policies coupled with WTO accession imposed as a step towards providing quality service to international customers. Although the competition in the market is intense, there is an increasing population of young professionals engaging in new technologies development and new management style establishment. This gives an opportunity for multinational companies to target China's growing markets. But most important of all, emerging economies should have clear understandings based on careful analysis of national conditions, in both domestic economic growth and global environmental issues. These findings will also contribute to the literature on developing and managing supplier-customer relationships in developed economies.

For government policy makers

Some implications are also apparent from this study for government policy makers. It will provide useful insights to multinational companies operating or thinking of starting an operation in China, regarding the important institutions and aspects of business environment they should seriously consider while developing their policies on business practices. There may be a need to review the way in which policy makers undertake investigations concerning organisations' global competitiveness. The results of this investigation highlight that the development of an appropriate strategy must be based on both internal and external environments, especially, the national cultural, technological and industrial contexts within which an individual organisation set an effective planning process. In doing so, it is important to recognise that managers' perceptions and actions of organisational objectives play an important role. Policy makers will benefit from this research with a better understanding of each other's role in specific issues.

Findings from this study may also have implications for China's foreign direct investment policy that would create more employment opportunities and contribute to the economic growth. For example, the younger generations of Chinese people are more willing to work in newer type of Chinese SOEs than traditional ones. Although there are more challenges and changes in such new companies. In addition, policy makers must be aware that WTO provides tremendous advantages and benefits to both the buyer and the seller. Therefore, government is also able to address these changes in the labour markets more directly. It will not only help the organisations gain more advantages, but also make the country more competitive.

Nevertheless, a fundamental concern for public policy makers is to develop industrial rules and regulations to avoid local business and economies being hurt by the rapid business expansion of foreign countries. Conversely, the government should foster domestic market competition by eliminating regulations to protect existing companies. Furthermore, results from this investigation suggest that policy makers should find out the mechanisms for

service providers to provide quality customer services. For example, make more access to resources available for young Chinese enterprises than the traditional SOEs. Because the availabilities to access to national resources allow young Chinese enterprises to provide customer services in a modern style of management rather than a tradition way of doing business. This will create more opportunities for collaborations with foreign companies in international business development.

For practitioners

This study provides a number of important insights for both suppliers and customers. First of all, the extent and effectiveness of the use of e-technologies in this study depends on several issues, which can have both direct and indirect influences on managing e-supply relationships.

Second, this study highlights the role of leadership in business relationship formation. The results suggest that leaders who have an ability to make decisions and are willing to interact with others will be supporting the establishments of business relations within and between their companies and other SC organisational members. It also enables the development of strong and long-term personal relationships while building up business relationships. This has a number of implications for company policy. For example, service providers may be able to build stronger relationships with their customers by promoting leaders' management styles and maintaining longer personal relationships between particular leaders and customers.

Third, effective communications between suppliers and customers within and across an organisation will contribute to the establishments of relationships as well as its business developments.

Fourth, findings from this study provide evidence of the importance that the adaptation and use of e-technology has in service relationships. Appropriate technological choices and investments in new technologies increase both suppliers and customers' competencies. Consideration on e-technology implementation can vary depend on the customers' demands and supplier firms internal and external environment characteristics. Particularly, it

becomes important to reflect on organisations' wants or needs to apply in each distinct service relationship in managing a relationship.

Fifth, a number of practical implications can be derived from this study to support organisations in managing their changes. A set of clear and competitive objectives focusing on the organisational development and highlighting areas of expected gain will guide the decisions with respect to the design and the management of change that are required for globalisation.

Sixth, this study shows the patterns of organisational changes through illustrating the dynamics of e-supply relationships formation and transformation in the specific network context. It indicates that a better understanding of Chinese culture in doing business will not only help many Western companies enter the most rapidly emerging Chinese market, but also enable China's telecom industry and companies to make significant changes in the near future (Xu, Harland, & Nandhakumar, 2004b).

Seventh, in this research, the conceptualization of the emergence of e-supply relationships in TelcoX represents circuits of interactions between managerial actions and social structures, and the particular cultural and technological context within which the interactions take place. The reciprocal interaction offers insights into the role of national and corporate cultures both inside and between organisations in shaping e-supply relationship in this specific context. The insights would be particularly valuable for Western organisations forming alliances with Chinese enterprises (Xu & Nandhakumar, 2003a, 2003b; Xu et al., 2004).

Finally, the empirical understanding generated in this context has implications for managing organisational inter-dependence of e-relationships, and assessing the effects of managing such relationships.

13.4 Concluding Remark

This chapter considers a number of issues, conclusions and implications related to the implementation and use of e-technology in developing and maintaining business relationships in a supply network. Although this has

been a study of a single industry attempting to cope with a particular kind of issues related with e-relationships formation and transformation, the severity of the situation under the investigation called for a broader range of adaptive responses from the target organisations. For example, as reviewed earlier, there are more and more global organisations in doing business in different countries. This is a great need for drawing some conclusions and implications from this study for global organisations. By the careful tracking of developments within the supply network members, it has been possible to identify a mode of strategic organisational adaptation that may serve as the basis for understanding and managing a wide variety of the situations confronting complex organisations.

Chapter 14

SELF-REFLECTIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

This chapter focuses on research reflections and recommendations for further research. It consists of three sections. Section 14.1 discusses the self-reflections including on research fields and focus, on selected research approach and methods, and on selected research sites. Section 14.2 presents the limitations of this research. Suggestions and proposals for further research are presented in Section 14.3.

14.1 Self-reflections

On research fields and focus

To arrive at these conclusions in this study, I started with a research overview that was presented in Chapter 1. I aimed to understand the research environment and background, which was very important for me to raise the research questions. By highlighting the key concepts, a literature review helped me to create a base for understanding the development of SCM and the key issues that this study focuses on. The discussions on the theoretical concepts, frameworks and models from different disciplines enabled me to draw on the ‘networks as relationships’ (Easton, 1997) as my theoretical lens to investigate the dynamics of the formation and transformation of e-supply relationships in the network context.

In this research, supply network refers to ‘a set of SCs, embodying the flow of goods and services from original sources to end customers’ (Harland, 1996). This view emphasises the importance of customer needs and highlights the strategic nature of SCs (Lamming et al., 2000). Concerning the strategic network, I thoroughly reviewed a body of studies on the impact

of the Internet technology on B2B relationships, which helped me to gain a better understanding on the role of e-technology in SCM.

One of the primary objectives of this study was to develop a conceptual model that would enable the investigation of formation and transformation of e-supply relationships in various network contexts. The newly developed conceptual framework (see Figure 11.1) is based on a detailed review of a wide range of literature, and the analysis of incorporating appropriate features of inter-organisational relationships from different perspectives.

This conceptual framework informs research in supply networks in four key ways. Firstly, investigating a set of activities in a supply network provides a rich understanding of each single exchange and interaction between the network members. As these findings generated were based on a multi-perspective, they can be examined from a range of academic disciplines. This way of leveraging multiple perspectives can contribute to the theoretical development, which may make it difficult for a single perspective study. Secondly, the contribution of this conceptual framework enables us to reflect on a large number of issues associated with network studies. For instance, whether the selected theoretical lens was appropriate to study other networks. Thirdly, to apply this conceptual framework in further research, it will provide analytical consistency that enables greater sharing and comparison of different studies.

On selected research approach and methods

With regard to the research approach and methods, I took the suggestions of IS researchers (Walsham, 1993; Boudreau & Robey, 1999), a four-perspective theoretical foundation therefore was developed and presented in chapter 4. My identifications of key elements from a relationship perspective (e.g. Håkansson, 1982), a cultural perspective (e.g. Hofstede, 1980; Walsham, 2002), a technological perspective (e.g. Orlikowski, 2000) and a structurational perspective (e.g. Giddens, 1984) aimed to examine key themes and concepts (i.e. embeddedness of business relationships in industrial networks, embedded corporate cultural structure and embedded technological structure) emerged in this study from different aspects and

different points of view. My purpose of using this multi-perspective foundation was to develop a synthesized framework on e-supply relationships in the network context that was presented in Figure 11.1. As seen, this newly developed conceptual framework was to benefit from this theoretical foundation.

To carry out this study, I used an interpretive in-depth case study approach (Walsham, 1993; Orlikowski & Baroudi, 1991) with semi-structured interviews (Nandhakumar & Jones, 1997) and direct observations of research methods. As a group of semi-structured interview questions guided this study, all relevant questions were guaranteed to be asked and the possibility of losing focus was avoided. The open-ended questions in the initial stage were also desirable to let information emerge from the case site. Respondents were thus given the opportunities to express their own thoughts on the topic of interest as freely as possible. Final points from respondents on the relevance of the questions in relation to their working relationships were made to verify the research focus. Also, this was done in order to refine the objects observed in the case site and redefine the further studies topics.

In order to avoid 'pushing' or 'misleading' attitudes during each interview, I tried to be self-aware of my own knowledge and assumptions of specific situations. Listening to each answer, taking the key words and determining the next question based on what was being said, was vital to elicit more information. This was different from people taking turns talking in ordinary conversations. In addition, choosing appropriate words and asking questions in a polite manner was very important to ensure a good relationship between myself and the interviewees. Moreover, selecting the topics and changing the models or formats to match the interviewees' backgrounds or knowledge helped me to keep the respondents interested. It also enabled the whole interview process to proceed successfully.

Observations offered me the opportunities to make informal conversations and discussions with the interviewees and other staff of the organisations during each visit. These talks and face-to-face interactions with participants enabled me to gain better understanding of the decision-making of e-

technologies implementation and related organisational behaviours on the development of business relationships. As in the face-to-face situation, these participants were fully 'real' in a present time. Their subjectivities were available to me through a maximum of symptoms, such as languages, dress, attitude, actions and so on. This reality was a part of the overall reality being explored.

The employed research approach and methods in this study allowed sufficient access to knowledge and meaning of case study sites to be gained, which helped me to develop a plausible and credible representation of people's interpretations. My social background was a critical resource when doing data analysis. Well-organised data helped me to avoid being overwhelmed by a large amount of data. I followed the procedures of data analysis presented in Figure 5.2 that facilitated the explanation on transformation process of e-supply relationships over time.

On selected research site

To provided a description of the wider context in which the e-supply relationships were taking place, I reviewed the Chinese social context (e.g. *'the 36 ji'* (Ghauri & Fang, 2001), cultural context (e.g. *guanxi* (Pye, 1986; Luo, 1997)), technological context (e.g. CRM strategy) and industrial context (e.g. SCM, Telecom, IT and Internet industries), and aimed to understand the impact of wider research areas and ensured a detailed 'network context' was provided for this study. It also shaped my research question that is specifically focused on cultural issues.

The way of presenting this case study in chapter 7 represented four levels of study (Harland, 1996) on the organisational relationships that were involved in my research: internal relationships, dyadic relationship, chain relationship and network relationships. These levels of study helped me to meet my objectives that were 1) to understand and examine business relationships within each firm or level and between these levels; 2) to compare the business relationships at different stages; and 3) to prevent losing sight of the original research purpose and questions from a large amount collected data. The aggregation of the information gathered at the level of the dyadic

relationships gave insights into the chain relationships; and applying the dyadic relationships to the chain relationships provided insights into chain relationships effects in the network contexts. The employment of these levels of study also enabled me to explain the structuring and restructuring of a network by defining the network activities in the social, cultural, industrial and technological contexts.

14.2 Limitations of the Research

To summarise the results from this study, great effort has been made in overcoming some of the limitations. Firstly, since this study was carried out in a Chinese SOE in a public sector, it was constrained by a relatively difficult access to the case site, which limited the types of analysis that could be undertaken. Although being a native helped me to gain some access that wouldn't have been possible otherwise. Data on all contextual and strategy aspects (e.g., detailed Chinese government policies on the further development of telecom industry, experiences of Western companies in developing business in China, overall strategy of the multinational companies) were not able to be collected, which also might have shed additional light on the core phenomenon of interest. Due to the access difficulties and time limitation, this research is also limited to the interactions in a set of suppliers and customers business relationships.

Secondly, as this research did not identify whether the differences of individuals' perceptions of business relationships are significant enough to translate into actions and impact on the process of individuals' decision-making, it examined only whether differences in perceived business relationships influence organisational interactions.

Thirdly, from a supplier's point of view, this research explored that a relationship with its customer constitutes an important organisational objective. However, it cannot explain to what extent it is directly linked to an organisational development because it is beyond the research scope. The dynamics of formation and transformation of e-relationships in Chinese cultural context was viewed as a form of organisational change. However, I believe that this constitutes only a part of the organisational development.

Fourthly, this case covered only the telecom industry. Although the results are plausible, whether they constitute a general pattern existing in other industries still remains unclear. It has been limited to the context of domestic relationships inside China.

14.3 Recommendations for Further Research

Further longitudinal studies in this particular organisational context would be needed to help to elaborate the theoretical conceptualisation and the understandings gained from this study. This study at TelcoX so far offers the first step toward a comprehensive conceptualisation of the formation and transformation of e-supply relationships in diverse cultural settings and its wider network context. Although the study generated some empirical understanding of the importance of national and corporate cultures in shaping e-IORs, a further study in telecom organisations in a different, Western context would offer valuable comparative data. Further research would attempt to investigate the difference in magnitude of such interaction effects across nations with different levels of economic and/or technological developments. Cross-national research comparing several countries at different stages should generate more insightful results.

Moreover, this study conducted in a Chinese SOE, further efforts could involve attempting to examine these key factors that influence e-IORs formation and transformation in a foreign company that operates its business in Chinese social, cultural, technological and industrial contexts. It would also be useful to consider if the constructs examined in this study might also exist in other contexts. In future studies, the newly developed framework provided in this study could be expanded to include additional variables (e.g. trust, power) and other issues (e.g. economics, social factors), which might affect the e-IORs. This conceptual framework could have potential applications in other areas of these contexts as well.

In an outsourcing relationship, it would be interesting to compare the patterns identified here with the patterns that may occur in newer

outsourcing relationships. It would also be interesting to examine the constructs discussed in this study in business relationships that involve other services and products (e.g. a computer manufacturer and its pre- and post-services). For future researchers, it would be useful to consider the degree to which the relationships found in this study in a business service context may be applicable in situations that involve a blend of services and products.

Furthermore, this approach could focus on an expanded set of linkages between a buyer and a seller. For example, research could specifically examine the power positions of both the buyer and the seller. It would also be useful for researchers to examine how customers make their judgments and the conditions under which they may allocate responsibility to service providers. This may provide a deeper understanding of the nature of service quality and its role in business relationships. Other researchers are encouraged to carry out further research in exploring general patterns of organisational change that may include other dimensions.

Finally, further studies are also suggested to examine whether strategic collaborations between suppliers and customers has a significant impact on organisational performance. And, the impact of business partner's corporate culture could be explored in greater depth by incorporating factors such as the foreign companies' past experiences at being a multinational or experiences accumulated in the host country (e.g. China) and the local companies' prior experiences with foreign companies.

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Glossary of Chinese Terms

<i>Da guo fan:</i>	Eating out of one big pot
<i>Dan wei:</i>	Work unit
<i>Guanxi:</i>	Human relationship or personal connections on which an individual can draw to secure resources or advantages when doing business as well as in their social life
<i>Guanxi-platform:</i>	An emerging concept of human relationship that is regarded as 'a platform embodying value, equality and respect' on which the cooperation and competition among parties (both individuals and organisations) can be ensured
<i>Ling dao:</i>	Unit's head
<i>Mianzi:</i>	Giving face is a symbol representing respectability, reputation and pride
<i>Shi xi:</i>	Kinship
<i>Tie fan wan:</i>	Iron rice-bowl
<i>The 36 Ji:</i>	The Thirty-Six Stratagems are ancient Chinese military stratagems and tactics for triumph and survival. These stratagems can be understood as carefully devised Chinese schemes that deal with various kinds of situations and gain psychological and material advantages over one's adversary.
<i>Wai ren:</i>	Outsider
<i>Zhi xi qin shu:</i>	Directly-related members of one's family
<i>Zi ji ren:</i>	Insider

Appendices

Appendix 1 Semi-structured interview questions

Date: _____

Venue: _____

Interviewee: _____

1. Introduction

I am a postgraduate research student in the School of Management at the University of Bath in the United Kingdom. My research is about an in-depth study on the emergence and transformation of electronic supply (e-Supply) networks. The main objectives of this study are to investigate the dynamics of the formation and transformation of e-supply networks over time; and to gain a better understanding of inter-organisational business relationships. Furthermore, this study aims to provide better insights into organisational interdependence by application of electronic technology (e-Technology).

Everything that you say will be kept confidential and no references are made to companies or individuals. There are no right or wrong answers, I am as interested in what are the key issues associated with the emergence and transformation of e supply networks? And, how they influence the process of change within the supply networks? What is the role of trust, both inside and between organisations; and how it develops and maintains in the supply network relationships?

Please don't feel that just because I am asking questions about Internet technologies that you have to be any more positive (or negative) towards it than you would be on a day to day basis. Some questions or areas therefore will inevitably be more or less relevant to your business.

You will receive a summary on what your answers and experiences have been put into context.

2. Background Information

1. Could you please describe your job and responsibilities in your company? And, what does your company do? (e.g. manufacturing, service, installation, maintenance)
2. What kind of people (internal and/or external) do you work with the most (e.g. sales, marketing, technicians, procurement or back-office staff)?
3. In order to put your answers and experiences into context, could you please describe to me how your company operates? Also, who you work with in terms of external partners?
4. How close do you work with each of those partners? Does your business heavily rely on (or even depend on) this relationship?

3. Working Relations

1. What does a good relationship mean to you?
2. Could you please tell me about a successful (for example good team communication, good information-sharing, resources-leveraging, supportive team members, good teamwork, etc.) team of which you were a member. What was the most outstanding characteristic of that team? What was your role within that team?
3. How you have handled a dissatisfied (lack of communications, not supportive team members, less information-sharing and/or resources leverage, etc.) relationship with your team member and/or business partner in the past, if any?
4. What factors would you consider in assembling a team (an alliance)?
5. What are the pitfalls to be avoided in building an effective team?

4. Cultural Issues (different individual cultures, corporate cultures, trust perspectives)

1. What're your experiences working with foreign colleagues and/or business partners?
2. Could you please describe a typical situation where you worked with team members and/or business partners with different (corporate) culture backgrounds?
3. What key factors would you consider in working as a cross cultural team or an alliance?
4. Could you please tell me how important do you think trust between team members and/or business partners? What does 'trust' mean to you?
5. In what way is the term 'trust' being used?
6. Could you please tell me about a situation in which you dealt with 'distrust'? What were your thoughts and feelings when it happened?

5. Change Issues (individual, organisational, technical, relationships)

1. What type of information technology (e.g. Email, EDI, ERP, Call Centre, e-procurement, etc) does your company use for communication internally and externally?
2. How was the technology implemented? What do you think about it (useful, exciting, threatened, etc.) before and after it was adopted?
3. What positive changes have occurred during your working since such technology has been adopted (easy to use, acceptable by employees, compatible with previous systems, etc)?
4. What negative changes have occurred during your working since such technology has been adopted (uneasy to use, unacceptable by employees, incompatible with previous systems, etc)?
5. Could you please describe an event or activity affected by these changes in your daily work (e.g. the changes for internal and external communication; the changes in interaction patterns)?
6. What helps you to manage these changes (training & learning, teamwork, management co-ordination, collaboration, adjustment, balance, trust, etc)? What problems might you encounter? What are the sources of these problems?

7. What do you think is the most important effective way to deal with changes? (training & learning, teamwork, collaboration, etc)? How did you discover them?
8. Could you please describe how have you been affected through the adoption of this technology?
9. How has one of your major internal and/or external business partners been affected through the adoption of this technology in your company? Also, how has the working relations been affected?
10. Is there anything that you might not have thought about before that occurred to you during this interview (the changes within your company and your business partners, even yourself; the key issues influence your daily work or relationships inside your company or among your business partners, etc)?

Appendix 2: TelcoX's 'Sixteen Words'

Trustworthiness & Communication: All TelcoX people should trust each other, trust our mission, trust the social value of our products, trust the colleagues and team members working together and be confident of everybody who can fulfil one's tasks successfully. An excellent environment provides good working conditions. We believe that communication is a good way to solve all the problems and to promote trust that creates pleasant working environments.

Progress & Enthusiasm: Challenge ourselves continuously without satisfaction with achievements we have obtained. Be happy to help others. Work with enthusiasm and courage to discover problems and solve them with creativities. Be brave in front of difficulties and challenges without complaint. Aiming high and strive for taking the lead in field of our industry, products and services.

Low-key & Hard working: To work honestly without exaggerations. Strive for practical results in a thoroughgoing manner. Regard the company as one's own home. Be industrious and thrifty in management without wasting time.

Achievement & Commitment: Strive for greater achievements. Let figures speak for themselves. Keep promises among staff and departments, between upper authorities and subordinates, company and stockholders as well as company and customers.

Appendix 3: TelcoX's Mission

By integration of structural and technical innovations, seek the way for building up a model of management, development and competition for telecom industry of new types in order to serve the strategies of reforms implemented in state-owned-enterprises, telecom systems as well as innovations of the knowledge.

To our motherland

We believe firmly that the best way for us to realise individuals' ideal and value and to promote the social progress as well as to render services to our motherland is building up a modern telecom industry of the first-class.

To our customers

We believe firmly that the developments of our enterprise and individuals' success stem from the products and services of first-class we provide to our customers. To develop continuously telecom products and services of excellent quality is an endless goal for TelcoX's people.

To our staff

We believe firmly that staff is the most important wealth of the enterprise. The main purpose of the enterprise to achieve great success is to provide opportunities of developments for our staff. The ideal working environment of us is a pleasant, fair and positive one.

To our business

We believe firmly that the width of broadband should be the important basic facilities for the society in the future and guarantee for the modernisation in China. It is our goal that all the Chinese enjoy the width of broadband and communication at the speed of light.

To our investors

We believe firmly that the permanent success of enterprise is based on our continuous repay to our stockholders and investors. The most important foundation for us to accomplish the mission of TelcoX is to treasure every bit of assets of our enterprise, never be unworthy of the trust by investors as well as to render continuously still richer and thicker repay to them.

